Proceedings of the Indian Central Cotton Committee 19th Meeting. 1929 July

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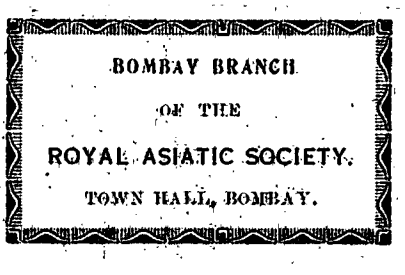

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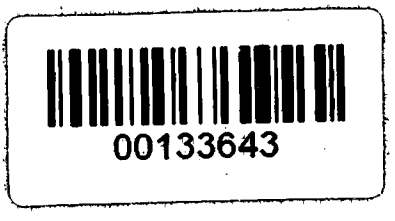
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Proceedings 07

INDIAN CENTRAL COTTON COMMITTEE.

19TH MEETING—JULY 16TH TO 18TH, 1929.

(Held at Vulcan House, Ballard Estate, Fort, Bombay).

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Present :

Dr. W. McRae (President),
Mr. S. D. Saklatvala (Vice-President),
Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., M.L.A.,
Mr. D. Milne, C.I.E.,
Mr. R. D. Anstead, C.I.E.,
Mr. T. F. Main, O.B.E.,
Sir Sorabji B. Mehta, Kt., C.I.E.,
Sirdar Ujjal Singh, M.L.C.,
Rao Bahadur Bhimbhai Ranchodji Naik, M.L.C.,
Rao Saheb V. Krishna Menon,
Rai Bahadur Lala Sewak Ram, M.L.C.,
Mr. F. J. Plymen, C.I.E.,
Mr. C. V. Sane,
Mr. G. C. R. Coleridge,
Mr. A. Howard, C.I.E.,
Mr. C. R. Palairet,
Mr. M. P. Kolhe, M.L.C.,
Rao Bahadur M. G. Deshpande,
Mr. H. H. Pandya,
Mr. T. G. Ralli,
Mr. J. Venesch,
Dr. W. Burns,
Mr. K. Sarabha Reddi, M.L.C.,
Mr. Girija Prasanna Chakravarty,
Mr. G. R. Hilson,

Mr. K. I. Thadani,
Rao Saheb C. S. Shirahatti,
Dr. D. B. Meek (on 17th only),
The Secretary, and
The Acting Director, Technological Laboratory.
Dewan Bahadur Sir T. Vijayaraghavacharia, K.B.E.,
Mr. H. A. F. Lindsay, C.I.E., C.B.E., I.C.S. (on 16th only),
Mr. M. S. A. Hydari, I.C.S.,
Mr. Roger Thomas,
Mr. Trevor Trought, M.A.,
Mr. P. B. Richards.
By invitation.

Letters or telegrams were received from the following members regretting their inability to attend the meeting:—

Mr. G. Clarke, C.I.E., M.L.C.,
Rao Bahadur K. J. Deshmukh,
Lala Niranjan Prasad,
Mr. Robert Lee,
Mr. H. A. Wilkinson,
Mr. T. D. Stock,
Dr. L. C. Coleman,
Capt. L. H. G. Conville,
Mr. B. C. Burt, M.B.E.,
Seth Kasturbhai Lalbhai,
Mr. B. A. Collins, C.I.E., I.C.S.

President's speech.

Owing to the retirement of your late President, Dr. Clouston, it is my privilege to welcome you to the nineteenth meeting of the Indian Central Cotton Committee. I am afraid I cannot claim to have an intimate knowledge of the detailed interests of the Committee but, in common with everyone interested in the progress of agriculture in India, I have noted with admiration and appreciation the valuable work accomplished during the short period of the Committee's existence. During the proceedings of this meeting, over which I have the honour to preside, there will be many opportunities of discussing the progress made and the results achieved as a result of the Committee's activities and, what is of even greater importance, of considering our future policy in the interests of the cotton growing and manufacturing industries of India. In view of the increasing public interest in the Committee and its work, which we all welcome, I feel sure—and I am confident of your agreement—that in leaving the leading part in such deliberations to our worthy Vice-President, Mr. S. D. Saklatvala, I am ensuring that the real value of the Committee's work will be most ably demonstrated and that, as a result of his wide experience of the Committee, our discussions will receive an authoritative introduction. In the first place, I should like, on your behalf, to extend a most hearty welcome to our distinguished visitor, Dewan Bahadur Sir T. Vijayaraghavachariar, K.B.E., who, as you all

doubtless know, has been recently appointed by Government to the high and responsible position of Principal Administrative Officer of the Council of Agricultural Research and Chairman of its Advisory Board. This appointment has a particular interest to the Indian Central Cotton Committee as the holder thereof will, in future, be *ex-officio* President of the Committee and will direct its deliberations. I think you will all agree that we may applaud the wisdom of the choice made by the Government of India and congratulate ourselves on obtaining so eminent an administrator and agriculturist as Dewan Bahadur Sir T. Vijayaraghavachariar to occupy the Presidential chair of the Committee. Also we are glad to welcome Mr. Hydari who has been appointed Secretary of the Council of Agricultural Research. From our previous experience of his work as Under Secretary to the Department of Education, Health and Lands, Government of India, we feel confident that his skill and industry will prove a most valuable asset to the Council.

Another appointment on the Council of Agricultural Research which commands our approbation is that of Mr. B. C. Burt as whole time agricultural expert. Mr. Burt's valuable services as Secretary of the Central Cotton Committee are still fresh in our minds and we are sure that he will be equally successful in his new sphere of action.

Another visitor whom we are glad to have with us to-day and who is always assured of a warm welcome at any meeting of this Committee is Mr. H. A. F. Lindsay, Indian Trade Commissioner, London. Mr. Lindsay was one of the original members of the Committee and has always maintained a most helpful and active interest in its activities. We are particularly in his debt on account of the ever ready advice and assistance he has given us with regard to the marketing of Indian cottons in England and we hope to take further advantage of his expert knowledge of this subject during the course of this meeting.

Since our last meeting, one of our most prominent members, Mr. F. J. Plymen, has received the honour of Companion of the Indian Empire. To him, I convey your hearty congratulations together with the sincere hope that he will long continue to represent the Central Provinces Agricultural Department at the deliberations of the Committee. We also have much pleasure in congratulating another member, Rao Saheb Bhimbhai Desai, on receiving the honour of Rao Bahadur and our best wishes accompany him on his retirement after many years of valuable service in the Bombay Department of Agriculture.

Also, since last we met, His Majesty the King Emperor has bestowed the high honour of Knighthood on one who, though not a member of this Committee, has always proved one of its best friends and supporters. I refer to Sir Frank Noyce. Sir Frank, as you will all remember, was Secretary of the original Indian Cotton Committee, on a recommendation of which this Committee was founded. He has always taken a keen personal interest in the work of the Central Cotton Committee and, in many other ways, has proved himself to be a sincere friend to the cotton growing and manufacturing industries of India. On your behalf, I offer him our most cordial congratulations.

As usual, there are several changes in the membership of the Committee to record. I have much pleasure in welcoming the following new members :—

Mr. T. G. Ralli,
Mr. H. A. Wilkinson,
Mr. Girija Prasanna Chakravarty,
Mr. K. Sarabha Reddi Garu,
Rao Saheb C. S. Shirahatti and
Mr. K. I. Thadani.

Mr. Wilkinson, who represents the Upper India Chamber of Commerce, has been a member on a previous occasion and we are glad to see him amongst us again.

I am sure that it is your desire that I should convey to the members who have just retired our appreciation of the work they have done on the Committee. In this connection, I may be permitted to mention in particular our late President, Dr. Clouston. Dr. Clouston occupied the Presidential chair of the Committee since 1924 and has now proceeded to England on retirement from the Agricultural Service. His tenure of office with the Committee, of which he was an original member, has been marked by a steady development of all the Committee's activities, a development to which Dr. Clouston himself contributed no small part. I am sure we all wish him many years of well-deserved rest in his native country.

Before concluding these personal references, it is my sad duty to refer to the recent much-lamented death of one of our former members, Mr. B. F. Madon. The loss of Mr. Madon is one which the commercial community of India in general and of Bombay in particular can ill afford. On this Committee, he will be specially remembered for his invaluable services on various Sub-Committees, particularly in connection with our inquiries into the finance and marketing of the cotton crop up-country. On your behalf, the Standing Finance Sub-Committee forwarded a Resolution of sympathy to Mrs. Madon and to the late Mr. Madon's firm, Messrs. R. D. Tata & Co., expressive of our grief in their sad bereavement.

On the long agenda, which has been placed before us at this meeting, will be found many subjects of great interest and importance. You will see that on several of these, we shall consider reports submitted by our Sub-Committees, whose preliminary deliberations have greatly simplified our task. To the members of these Sub-Committees—and particularly to the non-official members—I desire to express our appreciation of their labours.

From the papers before you, you will see that we have to discuss various matters connected with the working of the Cotton Transport Act in different parts of India. Since we last met, the Hyderabad State Cotton Transport Bill has become law and it is the earnest hope of all of us that this legislative measure, combined with the Hyderabad Cotton Research Scheme, financed by the Committee, will result, in course of time, in the rehabilitation of the important area of long staple

indigenous cotton known as "Hyderabad Gaorani." In the Central Provinces and Berar also, there is every prospect of a stable advance in cotton improvement by the extension of Dr. Youngman's high yielding and wilt resistant Verum variety combined with the application of a Cotton Transport Act to certain areas of that province. My predecessor, in his opening address, at the sixteenth meeting of this Committee, referred to the necessity of the Cotton Transport Act being accompanied by a thoroughly organised seed distribution scheme if it is to be effective. In view of this opinion, in which I concur, I do not think we need be unduly perturbed at the hesitancy shown by certain Central India States to apply the Act to their territories and, I feel sure that whenever, as a result of work in progress at the Institute of Plant Industry, Indore, an improved type of cotton becomes available for distribution, the States in question will lose no time in applying the Act for their obvious benefit and protection. In Bombay Presidency, the thorny question of the re-establishment of the restrictions on road transport in the Surat protected area has not yet been finally settled and you will be asked to consider a further reference from the Government on this important matter.

One of the most important items on the agenda of this meeting is the proposed amendment of the Cotton Ginning and Pressing Factories Act and the Rules thereunder which deal with the marking of bales. In view of the importance to the cotton cultivator of the provisions under this Section of the Act, I sincerely hope that a solution of the difficulty will be arrived at which will meet the wishes of all sections of the trade without unduly weakening the objects of the Act.

We have to consider matters affecting the improvement of cotton marketing, both in India and abroad. In Hyderabad State, the introduction of an Agricultural Markets Bill commends itself as a big advance in the right direction. The Bill follows the provisions of the Bombay Cotton Markets Act but it has been framed so as to extend, if considered desirable, to other articles of agricultural produce besides cotton. During the past year, there have been marked indications of an increased interest in Indian cottons being taken by spinners abroad. In the papers under Subject 9 of the agenda before you, you will find evidence of this growth of interest in the form of a resolution passed by the Federation of Master Cotton Spinners' Associations, Ltd., Manchester. I think you will agree that we are fortunate in being able to count upon the Indian Trade Commissioner, Mr. Lindsay's assistance in our discussion on this representation.

Unfortunately we are not yet in the happy position of being able to omit from our agenda consideration of various malpractices and abuses, the continued practice of which is adversely affecting the cotton grower and the cotton trade of the country. A perusal of the authoritative trade reports on different styles of staple Indian cottons, which have been placed before you in connection with another subject on our agenda, will supply ample evidence to what extent the prevalence of these malpractices is

frustrating the work of Agricultural Departments and of this Committee in cotton improvement. In view of the present situation, I feel sure that whatever further measures this Committee deems necessary to check such abuses as watering, mixing, false packing, etc., will command the approval and support of all responsible sections of the cotton trade in India.

A very interesting subject before us deals with the Egyptian Government scheme of loans on security of cotton to assist the small producer. This scheme was brought to the notice of your Local Sub-Committee by Sir Purshotamdas Thakurdas and the Sub-Committee considered it of so great interest that they recommended that it should be included in the agenda for this meeting in the hope that the scheme would be fully discussed in full Committee. The Egyptian proposals carry added interest for us in view of the recent investigations into the finance and marketing of cotton up-country, conducted under the auspices of the Committee.

Your Agricultural Research Sub-Committee, which meets this afternoon, has a very heavy programme of work before it and will submit no less than five reports to the full Committee when we reassemble tomorrow morning. All these reports are important and two of them are outstandingly so. I refer to the report on the position of the Committee with regard to agricultural research and to the report on the Committee's scheme of research scholarships. I think the Committee has every reason to be proud of its contribution to agricultural research in India which has placed the cotton crop in a most enviable position in comparison with the other main crops of the country. The Committee, in addition to making a very large grant to the Institute of Plant Industry, Indore, is making grants-in-aid to twelve cotton research schemes in the Provinces and has made provision in the current year's budget for an additional two schemes which have not yet started work. As is usual at our July meeting, we have before us Progress Reports on each of these schemes which will also be considered in detail by the Agricultural Researeh Sub-Committee. I may be permitted to emphasise here the fact that all agricultural research work requires time and that it takes several years' investigation to produce practical results. The Committee has been financing the oldest of its schemes for a period of only six years, *i.e.*, six generations of the cotton crop and though, at this stage, an estimate of progress and possibilities can be made, no fair judgment of our research schemes on the basis of actual practical results obtained can be formed at present. The Agricultural Research Sub-Committee have also been asked to examine and report upon the research scholarship scheme of the Committee. One most important point appears to be the future employment of the Committee's scholars after the expiry of their term of scholarship. Although no guarantee of subsequent employment can be given by the Committee, I am sure that we all agree that it is in the best interests of the Committee that its scholars should find suitable employment at the end of their training. I feel certain that this point will receive the most earnest consideration of the Sub-Committee.

As Mr. Turner, Director, Technological Laboratory, Matunga, proceeded on leave out of India on June 14th, 1929, it was considered necessary to hold the meeting of the Technological Research Sub-Committee prior to his departure. A report of that meeting is before you together with a most interesting Progress Report, submitted by the Director before he left. As you will see the Spinning and Testing Laboratories have been fully occupied during the past half-year and I am sure this work is highly appreciated by the Provincial Agricultural Departments.

In this connection, I would also like to mention the very interesting and useful investigations which are being carried on in the Spinning Laboratory on such subjects as the effect of differing degrees of humidity on spinning, blow-room tests and various systems of high drafting. Such work has a very practical interest to the great mill industry of India and is a most valuable and necessary complement to the other work carried on at the Technological Institute.

In conclusion, I might be permitted to make special reference to the recent visit which your Vice-President, Mr. Saklatvala, together with other members of your Standing Finance Sub-Committee made to the Institute of Plant Industry.

This visit was of special interest in view of the fact that the next meeting of the Central Cotton Committee is to be held at Indore but its real significance appears to lie in the attainment of a closer understanding and co-operation between the agricultural and the trade interests on the Committee, to the mutual advantage of both and towards the common objective of the increased welfare of the Indian cotton grower.

Sir T. Vijayaraghavachariar said that he appreciated most highly the honour of being invited to be present at this meeting of the Committee. He hoped that he would get to know the members of the Committee much better in the future and he was grateful for the courtesy they had extended to him by their kind invitation to attend their deliberations on this occasion.

Mr. Lindsay said that he wished to add his thanks to those expressed by Sir Vijayaraghavachariar for the invitation to attend this meeting of the Committee. It was a kindly thought on the part of the Committee to include in their invitation one of their oldest members in himself together with their newest member, Sir T. Vijayaraghavachariar. He had known Sir T. Vijayaraghavachariar for many years and could thoroughly commend him to the Committee and he was sure they would find in him a pillar of support as their future President.

The President announced the detailed arrangements made for carrying out the business of the meeting and stated that Messrs. Coleridge and Plymen had been co-opted as members of the Agricultural Research Sub-Committee which would meet at 2-30 that afternoon.

The Vice-President said that, during the Presidential address, some allusion had been made to the services rendered to the Committee by

their late President, Dr. Clouston. He thought it was the duty of the Committee, before opening the proceedings of this meeting, to place on record their appreciation of the tact and ability shown by Dr. Clouston while presiding over their deliberations during the past four years.

The Vice-President moved the following resolution :—

RESOLUTION 1.—"The Central Cotton Committee desire to place on record their appreciation of the work of Dr. Clouston who was a member of the Committee for seven years and its President from 1924-28. Dr. Clouston's tact and co-operation have contributed largely to the success of the Committee's meetings."

Sir Sorabji B. Mehta seconded the resolution which was carried unanimously.

SUBJECT 2.—*Confirmation of Minutes.*

The minutes of the 18th meeting (11th-12th December 1928) were confirmed.

SUBJECT 3.—*Comments* of the Government of India on the Annual Report of the Committee.*

The letter from the Government of India was recorded.

SUBJECT 4.—*Nomination of a representative of the Indian Central Cotton Committee on the Advisory Board of the Council of Agricultural Research.*

The President moved the following resolution :—

RESOLUTION 2.—"That the Central Cotton Committee nominate Mr. S. D. Saklatvala as their representative on the Advisory Board of the Council of Agricultural Research."

He said that he felt certain that this resolution would receive the unanimous approval of all members of the Committee. Mr. S. D. Saklatvala was one of their most energetic and hardworking members and his distinguished services to the Committee were recognised last year by his appointment as their Vice-President. The Committee was giving of its best in nominating Mr. Saklatvala to the Advisory Board of the Council of Agricultural Research and he was certain that the other members of the Board would find in him a most valuable colleague.

Rao Bahadur Bhimbhai R. Naik seconded the resolution which was carried unanimously.

Mr. Saklatvala thanked the Committee for the honour they had done him by this resolution and the President for the very kind remarks he had offered in that connection. He was afraid that he would not be a very useful member on a Board consisting almost entirely of experts but, as he felt assured that he could rely on the assistance of the expert members of the Committee, he would do his best to represent their views.

* Appendix I (page 81).

SUBJECT 5.—*Changes in personnel* of the Committee and Sub-Committees.*

The Secretary's note was recorded.

SUBJECT 6.—*Cotton Transport Act.*

I. Bombay Presidency.—(a) Surat areas†.

The Vice-President said that members would remember that the Government of Bombay had agreed to relax restrictions on road transport between the three areas of the Surat district protected under the Cotton Transport Act on the assurance given by the Sonsek group of Co-operative Societies that if this were done, their members would in future grow only the 1027 A. L. F. variety of cotton. This promise on the part of the Societies had not been kept and, as a result, the policy of growing only one variety of improved cotton in the protected area, south of the Nerbudda had not been put into effect. Accordingly, since 1927, the Central Cotton Committee had been urging the Government of Bombay to re-impose the restrictions on road transport but, for one reason or another, no such action had yet been taken. At the last meeting of the Committee, a resolution was passed requesting the Government of Bombay to move a resolution in the Legislative Council with the object of getting the restrictions re-imposed. Information had now been received from the Government of Bombay that no such resolution was moved and two letters from the Registrar, Co-operative Societies, Bombay Presidency, containing certain proposals submitted by the Sonsek Societies, had been forwarded to the Committee for opinion. These proposals were that, under certain conditions, half-pressed bales of ginned cotton should be permitted to come from the Olpad-Ankleshwar area to Surat as it was stated that the Sonsek cultivators were not yet convinced of the superiority of 1027 A. L. F. over Surat 1A and that greater profit was obtained by their growing the latter variety. In addition it was proposed that a co-operative cotton press should be erected at Surat in order to press the cotton grown by members of the Co-operative Societies. These proposals had been carefully considered by the Local Sub-Committee who decided that the Government of Bombay should again be approached with a request to re-impose restrictions on road transport in order to prevent the spread of the inferior Surat 1A variety and that, if any co-operative cotton press should be erected, it should be situated north of the river Tapti and not, as proposed, at Surat. With regard to the comparative profits from growing 1027 A. L. F. and Surat 1A, the Local Sub-Committee decided to call for the opinion of the Director of Agriculture, Bombay Presidency, who replied that the figures given by the Sonsek Societies only related to one or two villages and were not of any real value or significance. The previous Director of Agriculture, Bombay, Dr. H. H. Mann, had expressed fully his opinion on the matter, *viz.*, that 1027 A. L. F. was the more profitable cotton, if it were grown over the whole area and this view was endorsed by the present Director.

* Appendix II (page 81).

† Appendix III (*a*) (page 81).

Even if half-pressed bales of Surat 1A cotton were permitted to come to Surat under license and were properly marked as 1A cotton, there would still be considerable danger that this cotton would pass off as Surat " Farm " cotton and thus obtain a higher value than its intrinsic quality actually warranted. The result of this could only be that the cultivation of this inferior variety would extend at the expense of the improved variety 1027 A. L. F. In view of the paramount necessity of maintaining the reputation of 1027 A. L. F. in the Surat area, it was essential that no risk of such a retrograde development should be undertaken.

The Vice-President moved the following resolution :—

RESOLUTION 3.—" That the Central Cotton Committee approves of the decision of the Local Sub-Committee to adhere to the original resolution passed by the Committee recommending that restrictions on road transport between the Olpad-Ankleshwar and Surat zones should be re-introduced and enforced until the growing of inferior cotton in the Olpad-Ankleshwar zone has been discontinued, and urges the Government of Bombay to place the matter before the Legislative Council at the earliest opportunity. The Central Cotton Committee further considers that the issue of any conditional licenses for the transport of half-pressed bales of ginned cotton from the Olpad-Ankleshwar area to Surat can only be deemed a temporary measure and that the continued cultivation of 1A cotton in the Olpad-Ankleshwar area is contrary to the approved policy of the Government of Bombay to introduce one superior strain of cotton throughout the whole of that portion of South Gujerat which lies south of the river Nerbudda."

Mr. M. P. Kolhe seconded the resolution.

Rao Bahadur Bhimbhai Ranchodji Naik said that he would like to have some information from the Director of Agriculture, Bombay, as to whether any advance had been made in the growing of 1027 A. L. F. cotton in Olpad taluka. He understood that, at a previous conference of the Director of Agriculture, the Registrar of Co-operative Societies and prominent members of the Sonsek Societies, it had been agreed that the Societies would take 1027 seed and that, accordingly, no restrictions would be necessary in future. Until the results of this arrangement were fully tested, he did not think it would be advisable to re-impose restrictions on road transport. He understood that the Societies had taken up more 1027 seed this year than they had ever done previously.

Mr. Main said that, as regards the introduction of 1027 A. L. F. cotton into the country, north of the Tapti, the present position was more or less a stalemate. The Agricultural Department advocated the cultivation of the 1027 variety and was anxious to extend it, but certain prominent growers of the co-operative societies did not wish that cotton but preferred to grow 1A which they considered gave them more profit under present prices. He had discussed the question of re-introducing the notification with regard to restrictions on road

transport with the Honourable Minister for Agriculture who, though not definitely opposed to such action, felt that it would be premature to bring this matter before the Council unless he could be sure of the support of such members as were most directly interested in this question. The Honourable Minister had also hinted that he would welcome an opportunity personally to discuss the question with the Indian Central Cotton Committee.

Sir Purshotamdas Thakurdas strongly supported the resolution. He said that he was sure that the Committee regretted very much the inability of the Government of Bombay to carry out the policy repeatedly advocated by the Committee during the past two or three years. The representation now put before the Committee for consideration was based on a letter from the Sonsek group of Co-operative Societies. It merely stated that *some of the cultivators* in the Olpad taluka were not yet convinced of the superiority of 1027 A. L. F. over Surat 1A cotton. He considered it would be a pertinent question to ask the Director of Agriculture, Bombay Presidency, how many persons were these in whose interests all this was being done and on account of whom all this delay had taken place ? If 1A cotton was actually so much more profitable than 1027 A. L. F., why did the cultivators of the Surat district and the bulk of the growers in the Olpad taluka continue to grow the 1027 variety ? Also, about three years ago, the Rajpipla State found that the cultivation of short-stapled cotton was practically going to ruin their cultivators. This State went to the Director of Agriculture, Bombay, and asked, not for Surat 1A seed, but for 1027 A. L. F. and it had persisted in its adherence to this variety ever since. The letters now submitted by the Government of Bombay for the opinion of the Committee appear to represent the demands of vested interests which could not be convinced because they did not wish to be convinced. He did not wish to criticise the Government of Bombay but he could not help feeling that they were not giving the consideration due to the views expressed by this Committee and that they were now asking the Committee to change a decision which they had arrived at on three separate occasions after very full consideration of the facts involved. The reason in a nut-shell why the Sonsek Societies are finding 1A profitable to grow is that that variety is benefitting indirectly by the just reputation of 1027 A. L. F. a better variety grown on a much more extended scale. To permit such an unjustifiable benefit to continue to accrue to the Sonsek Societies would, in his opinion, be a most short-sighted policy. The Local Sub-Committee in 1925 gave full and detailed reasons why the cultivation of 1027 A. L. F. should be extended in the Surat district. These reasons were as valid to-day as they were four years ago and, unless the considered advice of the Committee on the present question was acted upon promptly, the result would almost certainly be the continued depreciation of the 1027 crop and a consequent repetition of the critical condition of the cotton crop in the Surat district in 1912. If the Government of Bombay find that they are unable to carry through the Council what this Committee had unanimously and repeatedly urged them to do, it would be for the

Committee to decide what action they should adopt. If, for the sake of a few people, the Government of Bombay were going to permit a wrong policy to be continued and thereby to expose all the cultivators of the Surat district to a risk which it has taken the Agricultural Department fifteen years to remedy partially the Committee would have to consider whether it would be worth their while to expend more money on cotton improvement in the Surat tract. Great credit was due to the Agricultural Department for persevering with the 1027 A. L. F. variety and he did not think the Committee could do better than reiterate their former resolutions on this subject.

Sardar Ujjal Singh in supporting the resolution, asked the Director of Agriculture, Bombay Presidency, whether, in order to refute the arguments advanced by the Sonsek Societies as to the greater profit from the cultivation of 1A cotton as compared with 1027 A. L. F., it would not be possible to arrange for a series of demonstration plots to convince the growers.

Mr. Main said that, even taking the value of 1A at Rs. 20-22 per khandy lower than 1027 A. L. F., the difference was not sufficiently wide to knock out the cultivation of the 1A variety. The reason why this difference was not greater was that the price of 1027 A. L. F. had been held back by the continued growing of the inferior variety and it had been stated that if this inferior cotton could be checked, the price of 1027 A. L. F. would appreciate. If there was reality in this argument, he agreed that the work of replacing 1A by 1027 A. L. F. should be pushed on but he was somewhat disappointed that 1027 A. L. F. had not commanded an even bigger premium over 1A than it was doing at present.

Rao Bahadur Bhimbhai Ranchodji Naik said that he considered the Honourable Minister for Agriculture would find considerable difficulty in getting the Legislative Council to agree to the re-imposition of the restrictions on road transport. On the present issue, there was a distinct difference of opinion between the heads of the Agricultural and the Co-operative Departments and as long as such divergence of opinion existed the Honourable Minister would not find it easy to re-introduce the notification successfully in the Council. There was a former agreement arrived at under the regime of a previous Minister for Agriculture that half pressed bales should be allowed to come from Olpad-Ankleshwar to Surat on certain definite conditions. If the matter was raised in the Council, it would be pointed out that an agreement was in force and the opposition to the introduction of restrictions—which was already strong—would be strengthened. If the Director of Agriculture and the Registrar, Co-operative Societies, could arrive at a common opinion on the matter he thought the Honourable Minister would have considerably less difficulty in dealing with the subject in the Council.

Mr. Sane said that he considered that there was something behind the extreme keenness evinced by the members of the Sonsek Societies to have access to Surat for their cotton. If this 1A cotton was more

profitable than 1027 A. L. F. why did the Societies not arrange to have their own press north of the Tapti and so reap the full advantage of the increased profit from the cultivation of 1A ? This could well be done without interfering with the progress of 1027 A. L. F. which it had taken several years to establish in the Surat district, and South of the Tapti. The fact that the growers of 1A were so anxious to get their cotton to Surat appeared to him to indicate definitely that this variety was benefitting considerably by the reputation of 1027 in the Surat market.

Rao Saheb Krishna Menon said that the Committee should consider in whose interests this question of the transport of Surat 1A cotton to Surat had been raised. He thought that it was obviously not in the interest of the growers but that the desire for facilities for adulteration of 1A with 1027 A. L. F. was the real reason behind the request. There might be some dealers who desired to make increased profits by the mixing of superior and inferior varieties of cotton and, if so, proposals with such an object in view should be rejected as definitely contrary to the interests of growers.

Mr. Plymen said that, in the Central Provinces, they had been influenced in their consideration of the introduction of a Cotton Transport Act by being told that, unless the Act was brought in, the value of their cotton would be lowered. The ultimate good of this or that man was not the main consideration but the strong argument was put forward that, unless suitable legislation was enforced, the East India Cotton Association would classify their cotton in a lower grade. He wondered if similar influence could not be brought to bear in the case under discussion.

Sir Purshotamdas Thakurdas said, with regard to Rao Bahadur Bhimbhai R. Naik's remarks on the difference of opinion between the heads of the Agricultural Department and the Co-operative Department on this question, the view held by the Director of Agriculture had received strong backing from the Central Cotton Committee who had repeatedly passed resolutions in support of his contentions. It was therefore for the Bombay Legislative Council to decide which Department they would support as knowing best what was in the interest of the cultivators. The whole question depended upon which cotton was most profitable to grow. If 1A was as profitable as the Sonsek Society endeavours to make out, it was extremely difficult to see why it had not spread over all the other talukas of the Surat district. He would ask Rao Bahadur Bhimbhai R. Naik if it was not a fact that, if the cultivation of 1A increased considerably, the whole reputation of Surat cotton would suffer and also if the prices which 1A was fetching at present were not largely due to the reputation of Surat cotton as established by the variety 1027 A.L.F. ? If the replies to these questions were in the affirmative, he would suggest that it was Rao Bahadur Bhimbhai R. Naik's duty to assist the Honourable Minister for Agriculture to get the Bombay Legislative Council to regard this question from the growers' point of view.

The Vice-President said that, as far as he could judge, the trend of discussion had been distinctly in favour of the resolution and had indicated, at any rate, that the Committee were not impressed by the arguments put forward by the Sonsek Societies. The Government of Bombay had advanced no argument but the fear had been expressed that the notification would not be likely to be accepted by the Legislative Council. If and when such a situation arose, the position could be reviewed by the Central Cotton Committee but he did not think the likelihood of such action on the part of the Council should deter the Committee from expressing their decided views on the subject and passing the resolution proposed by him.

The resolution (No. 3) was carried unanimously.

(*b*) *Kumpta-Dharwar Area.**

The Vice-President said that, in contrast to their attitude over the last subject, the Government of Bombay had put into effect a previous resolution of the Committee dealing with the establishment of additional road-check stations on the boundaries of the protected Kumpta-Dharwar area. These stations, which would not be opened this year as cotton transport had now ceased, should be most effective in future in checking the entry of inferior cotton to the protected area through Indian States on its Eastern and North-Eastern boundaries. He thought that a letter should be sent to the Government of Bombay expressing the Committee's appreciation of the prompt action taken by them on the Committee's recommendation in this connection.

This was agreed to.

(*c*) *Broach.* †

The Vice-President said that the Secretary's note on this subject was mainly for information and that the Directors of Agriculture of Bombay Presidency and Baroda State might be in a position to furnish the Committee with further details with regard to the formation of the new protected Broach area.

Mr. Main said that part of the proposed new area was included in the territories of the Baroda and Rewa Kantha States. The representatives of these States had been consulted with reference to the inclusion of such portions of their territories within the scope of the Act and their replies were expected shortly.

Mr. Sane said that although he was not in a position to inform the Committee that the proposal of the Government of Bombay has been accepted by the Government of His Highness, he saw no difficulty in the matter. The matter was referred to his Department and had been recommended for acceptance and only the necessary formalities were responsible for any delay in further action.

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* Appendix III (*b*) (page 87).

† Appendix III (*c*) (page 89).

SUBJECT 9—*The Marketing of Indian Cottons in England.**

The Vice-President said that he felt sure the Committee would welcome the letter and resolution forwarded by the Federation of Master Cotton Spinners' Associations, Ltd., Manchester, in so far as the aim of the Federation was to increase the use of Indian cottons abroad. Any such extended use of Indian cottons would undoubtedly be to the ultimate benefit of the cotton-growers of this country and he had no doubt that the Committee would heartily co-operate towards this object. In order that such co-operation should be effective, it was essential that the Committee must know precisely what difficulties spinners abroad were faced with in obtaining their requirements of Indian cottons. He had no doubt that the Committee's distinguished visitor, Mr. Lindsay, would be able to throw some light on this point. At the same time, the Committee must receive the full support of the Cotton Associations at Liverpool and Manchester as, after all, it is these Associations that control and regulate the cotton trade in England. Certain suggestions had been put forward officially and the Committee had seen asked to explore the possibilities of setting up definite standards or types for East Indian cotton, of creating an official deferred delivery contract and of preventing mixing of varieties of cotton in India. Mr. Lindsay had previously brought to the notice of the Committee certain points in connection with the extension of the use of Indian cottons abroad which he thought would be of assistance to the Committee in formulating their views. These points, together with the letter and resolution of the Federation, had been carefully considered by the Local Sub-Committee. As regards standards, the Manchester Cotton Association had approached the Committee with a request for a set of the East India Cotton Association's standard types for Sind and Punjab cottons. Through the kind courtesy of the East India Cotton Association, a replica of their sets for Punjab cottons had been prepared and despatched to Manchester and a similar set of boxes for Sind cottons would be sent later when the Sind standards are prepared. As regards deferred delivery contracts, the Sub-Committee were unable to understand what real difficulty there could be in selling on extended contracts in Lancashire but he hoped Mr. Lindsay would make this point clear. As regards mixing, this subject formed a separate item on the agenda of this meeting and had been discussed at practically every meeting of the Committee during the past few years. The Committee were fully aware of the importance of discovering effective means of checking this malpractice. At present, the Indian exporter was put to considerable difficulty in that the present Empire Futures Contract did not provide a satisfactory hedge for East Indian cottons. This had been previously represented to the Liverpool Cotton Association who had partly met the request of the Committee as far as the basis of the contract is concerned and had altered this from "Strict low middling" to "low middling". However the Committee would be in a better position to discuss these matters after having heard what Mr. Lindsay had got to say on the subject.

* Appendix IV (page 89).

Mr. Lindsay said that, as Indian Trade Commissioner in London, he was approached by all sorts of trade interests who were not content with the conditions under which Indian cottons were marketed in England and he had to bear the brunt of such representations. The subject under discussion was a particularly difficult one as it contained so many different points for consideration. The question could be looked at from the point of view of the Manchester spinner or the Liverpool importer. These were accustomed to buying their requirements at their own door and, in this way, might be said to be somewhat spoilt in the matter of their purchases, as everything was made as simple as possible for them. The Indian cotton crop was the second biggest crop next to the American and, on that account, it appeared reasonable to ask that hedge contracts to facilitate dealings in Indian cotton, similar to those in use for American cotton, should be introduced into Liverpool. He had been insisting on this point in Liverpool for some time past and so far, the Liverpool Cotton Association had only made one small concession which had not gone far enough. He therefore would suggest that the reply to the resolution forwarded by the Manchester Federation of Master Cotton Spinners' Associations should include some reference to the Empire Futures Contract and to its requirements relative to the Indian cotton crop. The second point which had been brought to his notice by Liverpool importers was that the types of Indian cottons available for export should be made better known to purchasers in the United Kingdom. For this purpose, the Committee had sent type bales of different Indian cottons to both Liverpool and Manchester and this point had, in his opinion, been satisfactorily met. However the main difficulty to which his attention had been drawn was the question of what might be termed the deferred purchase system. Instead of putting down all his money at once and buying his requirements of cotton for a considerable period, the spinner would like to make a contract with the importer for the delivery of cotton as and when required, payment to be made after delivery had been effected. He had been told by spinners in England that, if some such system could be introduced with regard to Indian cottons, they would find less difficulty in meeting their requirements from India. He thought the answer to this was perfectly clear, namely, that the importer of Indian cotton in Liverpool must be prepared to meet the requirements of the trade. This matter was one for the trade itself to deal with and he believed that a beginning in that direction had already been made. Finally he would refer to the question of continuity of supply and, with regard to this matter, he was afraid he rather disagreed with his Manchester friends who took the line that they could not guarantee their support to Indian cottons unless they felt assured of a continuity of supply from year to year of the type or types in which they were particularly interested. He had replied that similarly India must be likewise assured of a continuity of demand as, if they in India could be certain that the Manchester demand would be maintained at a steady level from year to year and would not fluctuate with the quantity and price of the American crop, they would know very much better

how they stood. He had also pointed out that the system had been developed in India whereby the foreign purchaser came not only to the terminal port for his purchases but also went up-country and bought his requirements on the field. He did not think it was much use advocating a similar procedure to Manchester but, at any rate, it might be worth consideration and encouragement. After all, India consumed half her cotton crop herself and exported the other half and it was in the best interests of the country that competiton for this exportable half should be encouraged so that the best possible prices could be realized for the Indian growers.

Mr. Coleridge said that in his opinion some of the gentlemen who had been worrying Mr. Lindsay appear to have been extraordinarily badly served by their brokers. He happened to know himself of a firm in Bombay who had sold, a few days ago, two thousand bales of Surat cotton to Liverpool, delivery to be made by twenty bales per week up to next March. There must be many firms in Liverpool who would be glad to establish such business in Indian cotton; the only question being whether the spinners were prepared to pay the necessary interest and finance the carrying of the cotton. Any big firm in Bombay, such as Ralli Bros. or Volkart Bros., would welcome such an order for regular monthly shipments. He could not believe that the complaints in this connection were really very serious. He thought the sending of type bales to Liverpool and Manchester was an absolute waste of money and he felt certain that not one single contract had resulted from the despatch of such type bales. It might be good policy from the point of view of advertisement but could have no direct result in increasing trade. All purchases and sales were made on private types and this system was likely to continue as it had proved quite satisfactory and workable. With regard to the continuity of supply, India was quite prepared to sell her cotton year in and year out but she could not be held responsible for the vagaries of Nature. Although they might be prepared to sell now any reasonable type for delivery a year hence if the price was suitable, such catastrophies as unreasonable rains, frost, etc., could not possibly be foreseen. This was a legitimate trade risk and the trade was quite prepared to take the consequences and offer to meet the buyer in the most liberal way if the goods could not be delivered as per contract. With regard to the Empire Futures Contract, he felt it would be many years before it proved of very much use to India. Unless a contract was being dealt in freely, it could not be used as an efficient hedge and he felt that the ordinary American Futures Contract was quite satisfactory for present purposes.

Sir Purshotamdas Thakurdas said that he wished to endorse what Mr. Coleridge had said with regard to deferred delivery contracts. He knew that his own firm had contracts on their books for delivery of fifty bales monthly and, all that was necessary was that spinner should agree to bear the addition of carriage and interest charges. These would

have to be met whether the cotton was stored in Bombay or in Lancashire. He would like to refer in particular to the point regarding the setting up of universal standards or grades. He thought that universal standards for Indian cottons were bound to come and that, the sooner they did come, the better it would be for the reputation of Indian cottons. As the Committee would remember, he was the first to urge that the types for Sind and Punjab should be uniform both in Karachi and Bombay and, thanks to the action of the Karachi Joint Cotton Committee, that state of affairs was slowly coming. He attached the greatest importance to the establishment of universal standards for Indian cottons, not only in India but throughout the world, as it would result in the buyer, wherever he might be, knowing that Indian cotton could be obtained in two or three or more classes which were not fixed according to the vagaries of buyers and consumers at particular centres but which truly represented the various growths of Indian cotton. He was very glad that Mr. Lindsay had been able to be present at this meeting and he wished to express his admiration of Mr. Lindsay's work as Indian Trade Commissioner in London of which he had considerable knowledge. Mr. Lindsay had fully grasped the essential difficulties experienced by people interested in the use of Indian cottons abroad and the requirements of the trade in this direction. If Mr. Lindsay could help the Indian trade to further expansion not only in the United Kingdom but also on the Continent, he would be rendering a most valuable service to the cotton industry of this country.

The Vice-President moved the following resolution :—

RESOLUTION 4.—The Central Cotton Committee desire to express their appreciation of the interest taken by the Manchester Cotton Association, Ltd., and the Federation of Master Cotton Spinners' Associations, Ltd., Manchester, in increasing the use of Indian cottons in Lancashire and to assure these Associations of its full co-operation in any measures designed to broaden the demand for Indian cottons and so benefit the Indian producer. The Committee feel, however, that an essential preliminary to any such development is the amendment of the Empire Futures Contract so as to provide an adequate hedge for superior Indian cottons and would emphasise the importance of their previous representations to the Liverpool Cotton Association in this connection."

Mr. Coleridge seconded the resolution which was carried unanimously.

SUBJECT 7.—*Cotton Ginning and Pressing Factories Act.*

(*a*) *Proposed amendment of Rule 7 of the Rules under the Act.**

The Vice-President said that the Committee had received in the past frequent complaints from the East India Cotton Association that buyers occasionally took advantage of the technical provisions of the Cotton Ginning and Pressing Factories Act as regards marking of bales in order

* Appendix V (page 91).

to evade accepting a tender when it suited them to do so. This was undoubtedly a genuine trade grievance and the Committee had felt that it should be remedied. Accordingly, the Committee, in consultation with the East India Cotton Association had asked the Government of India to amend Section 4 (1) of the Cotton Ginning and Pressing Factories Act and Rule 7 of the Rules thereunder dealing with the marking of bales. The Government of India had now replied that, in their opinion, an amendment of the Act was not necessary for the purpose intended but that a redraft of Rule 7—which was submitted for opinion—would be sufficient to achieve the desired object. This redraft was approved by the Cotton Ginning and Pressing Factories Sub-Committee but, as the Sub-Committee felt that the East India Cotton Association was mainly concerned with this subject, they had forwarded the Government of India redraft to the Association for approval. The redraft did not meet with the requirements of the East India Cotton Association for reasons stated in their letter and it was decided to convene a Special Meeting of representatives of the East India Cotton Association and local members of the Cotton Ginning and Pressing Factories Sub-Committee in order to exchange views and endeavour to arrive at a mutually acceptable solution of the difficulty. After the subject had been very fully discussed at this Special Meeting and mainly in view of the fact that the Karachi Joint Cotton Committee had declared their intention of introducing a similar Bye-law with regard to the marking of bales in Karachi as was in force in Bombay, the East India Cotton Association's representatives agreed to give the Government of India redraft of Rule 7 a trial provided that only unmarked or wrongly marked bales in a tender should be liable to rejection and penalty and not, as at present, the whole tender of which such bales formed a part. He considered that this was a very happy solution of the difficulty and one, which did not require any amendment of the Act but merely an amendment of the bye-laws of the East India Cotton Association itself. Before moving a resolution in this connection, he would like to state that the Cotton Ginning and Pressing Factories Sub-Committee were in complete agreement with the representatives of the East India Cotton Association that the Government of India should be asked to see that the provisions of the Act were properly enforced up-country. There was not the slightest doubt that at present there is considerable laxity in the working of the Act, especially with regard to the requirements for marking of bales in different Provinces and Indian States and this was a main cause of the difficulties experienced by the trade in Bombay arising out of the working of the Act.

The Vice-President moved the following resolution :—

RESOLUTION 5.—"That the Central Cotton Committee approve of the decision of the Joint Meeting between representatives of the East India Cotton Association and local members of the Cotton Ginning and Pressing Factories Sub-Committee that, in order to alleviate any hardship inflicted upon the cotton trade as a result of the rules

for marking of bales under the Cotton Ginning and Pressing Factories Act, only such bales in a tender as are unmarked or wrongly marked should be liable to rejection and penalty on arbitration and not, as at present, the whole tender of which such bales may form a part. The Committee request the East India Cotton Association to make the necesary alterations in their rules to embody this decision."

RESOLUTION 6.—"That the Central Cotton Committee inform the Government of India that the redraft of rule 7 of the rules notified under the Cotton Ginning and Pressing Factories Act is accepted both by the East India Cotton Association and by the Indian Central Cotton Committee and that the Government of India be requested to issue the necessary notification as soon as possible."

RESOLUTION 7.—"That the Central Cotton Committee request the Government of India to impress upon Local Governments the necessity of strict enforcement of the provisions of the Cotton Ginning and Pressing Factories Act and Rules thereunder relating to the marking of bales in up-country presses and the importance of adequate penalties being imposed in established cases of non-observance of the Act and Rules or of faulty marking of bales."

Sir Purshotamdas Thakurdas seconded the three resolutions (Nos. 5, 6 and 7).

Mr. Plymen said that in his experience the use of old hoops was the cause of a considerable amount of trouble with regard to the marking of bales and was a practice which would be very difficult to check. He suggested that the old marks should have to be cut out before the hoops could be used a second time.

Mr. Lindsay said that it was most interesting for him to return to India after seven years and see, in practice, the working of an Act with the drafting of which he had a good deal to do. When the Act was drafted originally, it was hoped that it would have a beneficial, though indirect, effect on the purity of Indian cottons and on the care with which they were ginned and pressed. The rules were framed with the object of being clear and intelligible to everybody and it was hoped that they would be gradually introduced and finally become general trade practice throughout the country. It was only natural with such legislation to find little difficulties and exceptions cropping up from time to time but such troubles must be dealt with patiently as they occurred until a perfect system was evolved. He thought that, on the whole, the Act was working exceptionally well. There were undoubted difficulties due to the rather severe practice which had grown up that, if some bales of a consignment were not marked in accordance with the provisions of the Act or the Rules thereunder then the whole consignment might be rejected. This had not been the original intention. He had discussed this problem with Sir Purshotamdas Thakurdas who had taken a broad and statesmanlike view of the question from the point of view of both the East India Cotton Association and the Indian Central Cotton Committee. It was obvious that a system could not be enforced

which enabled the purchaser, when the market went against him, to take full advantage of the letter rather than the spirit of the law. He commended the resolutions proposed to the Committee as he thought they were a satisfactory compromise between the requirements of the East India Cotton Association and the Indian Central Cotton Committee in this connection.

Sir Purshotamdas Thakurdas said that, while he supported the resolutions, he wished it to be made quite clear that he did so only in the light of such experience and information as was available at present. He did not wish his support on this occasion to be taken as precluding him from pressing for further modifications or amendments of the Act and Rules in the future should he consider such were necessary. It was really surprising how well the Act had, on the whole, been working up-to-date. Sir Purshotamdas gave an instance of hoops bearing a Khandesh press-mark being used on bales of cotton from Broach and the resulting difficulties which arose when these bales were delivered on the Continent. He said it was such questions which had decided the East India Cotton Association to seek the assistance of the Central Cotton Committee in getting the Government of India to modify the existing rules. The Act was not being administered uniformly up-country and a great improvement in this respect could be effected and would help in minimising the difficulties hitherto experienced by the trade. Fines imposed on press-owners for non-observance of the Act and Rules were quite inadequate in view of the heavy losses which their neglect might cause traders in Bombay. Everyone must agree that it was the duty of the Government of India to ensure the most accurate compliance with the spirit of the Act and that, while the Government were improving the machinery for the working of the Act in all parts of the country, including Indian States, the market which has proved most loyal to the Act by accepting it from the commencement should not be unduly penalised on that account. At present, he felt that the East India Cotton Association had exposed its members to undue risk in their forward contracts and, as he had been the prime mover in persuading the Association to accept the Act and Rules, he now felt it his bounden duty to press for the necessary relaxations which experience in working had shown to be required. He considered that the present resolutions offered a good solution of the difficulty as they did not unduly weaken the Act and, at the same time, they greatly reduced the danger of unduly penalising the commercial community. He was sanguine enough to feel that the Committee would consider the complaint of his Association sympathetically and that the resolutions would be accepted unanimously.

The Secretary said that, while dealing with this matter, he would like to bring to the notice of the Committee, two cases of infringement of the Act and Rules thereunder relating to marking of bales which took place in East Khandesh. The Collector of the district was asked to take measures to prosecute the offenders under the Act and a

prosecution was instituted. He was informed officially that, unless the arbitrators of the East India Cotton Association could go to Jalgaon and give evidence on the marking of the bales in the Magistrate's Court, the prosecutions could not stand and that a certified copy of the arbitration award of the East India Cotton Association was not sufficient evidence of an infringement of the Act and Rules. If this sort of thing is insisted upon, the enforcement of the Act up-country would be practically impossible and it was necessary to get a ruling on this point to enable prosecutions in the future to be carried on.

The resolutions (Nos. 5, 6 and 7) were passed unanimously.

SUBJECT 10.—*Cotton Marketing in Karachi—Common Staple length for Punjab-American in Bombay and Karachi.*

The Vice-President said that the question of a common staple length for 4F contracts in Bombay and Karachi had been discussed at a joint meeting of representatives of the Karachi Joint Cotton Committee, the East India Cotton Association and Punjab Members of the Indian Central Cotton Committee in December 1928. At that time, the Karachi Joint Cotton Committee were not prepared to alter the staple from 7/8" to 6/8" owing to existing contracts being unfulfilled and it was then agreed to hold another joint meeting this year to re-discuss the matter. However this second meeting had not been necessary as the Karachi Joint Cotton Committee had agreed to give the 6/8" staple a trial for a year although they were by no means convinced that this was the correct length for the contract. The question would have to be reconsidered after experience of a year's working on the 6/8" basis had been obtained.

The Vice-President moved the following resolution :—

"That the Central Cotton Committee appreciate the decision of the Karachi Joint Cotton Committee to agree, for the time being, to a $\frac{3}{4}$" staple for 4F contracts beginning with the 1929-30 season, which has resulted in the establishment of a uniformity for this contract in India which is most desirable. At the same time, the Committee note the stipulations qualifying the decision of the Karachi Joint Cotton Committee and agree that the matter should be fully re-considered after one year's working on the $\frac{3}{4}$" basis."

Mr. Coleridge said he was quite prepared to second the resolution but, when this matter was discussed in Karachi, opinion was unanimously against the 6/8" staple but the Karachi Joint Cotton Committee were unable to get a representative deputation to come to Bombay to discuss the matter again this year. They had therefore decided to give the 6/8" staple a trial for one year but, on that account, it should not be assumed that they were satisfied with the change. In Karachi, they still felt that by reducing the staple, they were lowering the value of the contract and would encourage adulteration. Next year, the Karachi Joint Cotton Committee would probably desire to return to the 7/8" basis. He did not think, therefore, that any resolution in this respect was necessary but that the letter from the Karachi Joint Cotton Committee should merely be recorded.

This was agreed to.

Mr. Milne said he fully endorsed Mr. Coleridge's views and he regretted that the Karachi Joint Cotton Committee had consented to a 6/8″ staple as he was sure this would give more room for mixing. However, as the matter would be re-considered after a year's working, he had no objection to offer.

2nd day—17th July 1929.

SUBJECT 18.—*Agricultural Research.*

I. General Progress Report.

The Secretary's note * was recorded.

II. Report † of Agricultural Research Sub-Committee on

(*a*) *Examination of the position of the Committee with regard to Agricultural Research and*

(*b*) *The improvement or deterioration of Indian stapled cottons during the past five years.*

III. Progress Reports and Programmes of work.

The President said that the report of the Agricultural Research Sub-Committee on these two subjects had been combined as it had been found convenient to consider them together in the Sub-Committee Meeting. The Sub-Committee had decided after a careful examination that the Committee's agricultural research schemes were, in general, on sound lines and gave promise of useful results in the near future. It had been decided to close down one scheme, namely, the Dharwar Cotton-breeding scheme on the Upland American type. The Sub-Committee had examined at length the interesting reports received from the trade on the improvement or deterioration of certain Indian stapled cottons during the past five years. It was obvious that the main cause of deterioration, where such had occurred, was due to the continuance of malpractices and abuses up-country. Arising out of the Sub-Committee's discussion on this matter, Mr. Coleridge had certain definite proposals to place before the Committee at a later stage of the proceedings.

The President moved the following resolution :—

RESOLUTION 8.—"That the Report of the Agricultural Research Sub-Committee be adopted."

Mr. Coleridge seconded the resolution and said that, as a result of his temerity in raising questions bearing on agricultural research, the President had retaliated by co-opting him as a member of the Agricultural Research Sub-Committee. Having attended the meeting of that Sub-Committee he could assure the Committee that it was by no means the dull afternoon which he had pictured and he was full of gratitude for having been co-opted. He hoped it would not be considered presumptuous on his part if he informed the members of the Committee that their Agricultural Research Sub-Committee was doing

* Appendix VI (page 95).

† Appendix VII (page 97).

wonderful work. There was no trace of petty jealousies at the meeting and everyone present was there to submit the benefit of his experience for the general good. He wished there had been more trade members on the Sub-Committee who could have endorsed these remarks, and he hoped that, as long as he remained a member of the Central Cotton Committee, he would have the honour of being re-elected to this Sub-Committee. He now desired to refer to the two letters which he had submitted to the Secretary. If he could have vizualised the vast amount of extra work which his proposed inquiries had necessitated, he was doubtful whether he would have brought the matters forward. However, there was no use in discussing that now and the work had been efficiently completed. He felt that, in the past, he had taken too little interest in the work of the Agricultural Research Sub-Committee and the finances of the schemes which it controlled. Possibly the way in which the bi-yearly meetings of the Committee were conducted had something to do with his indifference in past years. As a rule, the first day and the second morning of the Committee's meeting were taken up with debates upon subjects in which everyone was interested. In the afternoon of the second day, the reports of the Agricultural Research Sub-Committee and the Standing Finance Sub-Committee were rushed through and his general impression had been that these Sub-Committees were so thoroughly competent that it was only a question of automatically congratulating them and passing their reports. In future, he hoped that these most important subjects would be taken up much earlier in the meeting and would receive the close consideration and attention which they merited. He had recently been asked on many occasions by exporters, millowners and other representatives of cotton interests in Bombay what the Committee was doing with the money which was contributed to its funds. Such criticism was growing in strength and he felt the time had come when the Committee should come out into the open and let everyone know the excellent work which was being carried on. He himself had set out to make investigations on his own into the finances and agricultural research policy of the Committee and the following three main facts had emerged from his inquiries. Firstly, that the liquid assets of the Committee were approximately 27 lacs of rupees, secondly that the Committee had an annual income over the past five years of roughly 7 lacs and thirdly that the expenditure to date on agricultural research was 16 lacs. He wondered what the Committee were going to do with this sum of 27 lacs. It was surely obvious that they would not be allowed to retain it in the Bank earning interest at 6 per cent. If this huge balance was not utilized usefully and profitably, there would be people who would urge that the cotton cess be reduced or stopped altogether. This money must be employed beneficially and he considered that the time had now come when the policy of the Committee should be broadened. At present, their income and expenditure roughly balanced each other and according to the present policy, this state of affairs would continue while the Committee's balance would increase at compound interest in the Bank. He most emphatically considered that such a position was

not justified and that the Committee must consider means of devoting their balance to the benefit of the cotton growing and manufacturing industries of the country. Turning to the Committee's agricultural research schemes, Mr. Coleridge said that agricultural officers had nobly entered into the spirit of his request and had furnished the balance sheet of the working of their schemes for the past five years. He referred to a balance sheet in kind, not in money as these officers had been asked to state what they had done in the past and what they hoped to do in the future. He had also considered that it might be profitable to inquire at the other end of the scale and to start at the manufacturing end and ask spinners, exporters, traders, etc., what their opinions were about the improvement or deterioration of Indian stapled cottons during the past five years. This was roughly how these inquiries had arisen and he must plead his keenness on the work of the Central Cotton Committee for any trouble or increased work which had resulted from his requests. He felt that this Committee had done wonderful work in the past and would do still more wonderful work in the future and he apologised sincerely, if any criticism which he might have to offer should be offensive to any agricultural officer. He could assure them that all he was going to say about research schemes was in the best spirit and with the sole object of improving and strengthening the Committee's future policy. In dealing with agricultural research, he knew he was treading on delicate ground as a little knowledge was a dangerous thing and, although he had acquired a lot of information in the past few weeks, he hoped the experts would pardon any mistakes he might unwittingly let fall. On the whole, he thought the Committee had every reason to be proud of the research work which it was carrying out. During the past five years, very great progress had been made and he considered that the day was not far off when we could anticipate an increased yield of cotton which would bring in a striking return to the country and would make the Committee's expenditure look a miserable pittance in comparison with the material advantages gained. He was particularly struck with the work at the Indore Institute of Plant Industry, which he had visited personally. He thought the Committee ought to embody the results of their research work in a treatise and publish it at once for general public information. In this way, the Committee could give to the trade a full account of their stewardship. Turning to, what he might be permitted to call, the debit side of the situation, he thought there were one or two things wrong in the way in which the Committee was dealing with these schemes. For instance, the Dharwar Cotton Breeding Scheme on Upland American cotton should be discontinued. Dr. Burns had agreed to this and the Agricultural Research Sub-Committee had endorsed his opinion. Personally he was doubtful whether any material benefit would accrue from certain other of the Committee's schemes but these were his own opinions and merely meant that he was not yet convinced of the advisability of continuing the schemes in question. He also thought the Committee had too many small schemes scattered over the country and he would like to see these centralised, wherever possible. It was

a wrong policy to have small isolated schemes in different provinces. He also thought that the Committee should spare no money to get the best men available to take charge of their schemes and should vizualise the returns which big schemes conducted by the finest brains obtainable might mean in practical results to the country. He would not hesitate to close down a scheme which was not progressing merely because a considerable amount of money had already been put into it by the Committee. In business, the first loss is the best loss and it was inevitable that there should be some failures. To summarize briefly his remarks on agricultural research, he thought that all the Committee's research schemes should be strongly supported if they were likely to :—

(*a*) discover means to check any insect pest or growth which is damaging the cotton crop,

(*b*) result in an increased yield of *kapas* per acre,

(*c*) result in a permanent improvement in the spinning properties of any particular cotton.

He would like to emphasize (*b*) above, relating to increased yield, which was most important from the point of view of benefiting the cotton industry. He would like also to mention that, in his opinion, the Committee should devote its main energies to the improvement of *desi* cottons as he felt that the salvation on the Indian cotton crop lay much more in that direction than by experimenting with exotic or foreign growths. He hoped the Committee would support him in this opinion. He would also urge the necessity of one of the Secretaries of the Committee visiting each scheme from time to time so that the Committee could have first-hand independent reports on their progress at each meeting. If members of the Committee could also arrange such visits, it would be of inestimable advantage for them to do so. Mr. Coleridge then referred to the reports which had been received from spinners and traders on the improvement and deterioration of Indian stapled cottons in the past five years and said that these reports made rather serious reading. He thought that there was no doubt that serious deterioration had occurred in certain of these cottons and that the Committee must ask itself whether or not it could have done anything to check or prevent this deterioration. The causes appeared to be, in order of importance, malpractices, seed deterioration and bad cultivation. Dealing with malpractices, he considered that the Committee had no reason to congratulate themselves on the results of any action they had taken in the past. In spite of the funds at their disposal and the expert advice available, they had definitely failed to check malpractices and abuses up-country and in that respect the Committee were to a certain extent guilty for the deterioration which had been reported. He had a definite constructive proposal in this connection which he would submit to the Committee later in the meeting and which, he trusted would gain their support. This, in short, was the formation in Bombay of a Malpractices Sub-Committee of the Indian Central Cotton Committee consisting of six or seven members with full

powers to co-opt other representatives of cotton interests, whether members of the Indian Central Cotton Committee or not, to assist in their discussions. This Sub-Committee would deal with all cases of malpractices brought to their notice and if, after exploring all other avenues, they could find no means of checking such abuses, it might be necessary to consider again the question of legislative measures towards the licensing of gins and presses. He was not keen on legislation but it was essential that the continuance of these malpractices which were so adversely affecting Indian cottons must be stopped and, if a ginner or presser knew that his license might be taken away if serious malpractices were brought home to him, he felt it would go a long way towards checking this deterioration of Indian cotton. With regard to seed distribution, he thought the Committee should be prepared to use some of the funds at its disposal to lend money through Provincial Governments or other approved sources to the *ryot* in order to enable him to buy the best seed available. At present, the *ryot* was obliged to take any seed supplied to him by the *sowkar* and if for this reason he did not get good seed for sowing, it was impossible to expect him to produce better cotton. Various officers of Provincial Departments of Agriculture had submitted schemes in the past showing in what directions the Committee could assist in the work of seed distribution and extension and he considered that much valuable assistance could be given in such work. There would doubtless be certain technical difficulties but these should not prove unsurmountable. Thirdly, he maintained that, when the Committee got successful results from any of its research schemes, it was its bounden duty to follow these up and to broadcast and extend them throughout the cotton growing areas. If this were done effectively, it could never be said that the Committee was not justifying its existence. In conclusion, Mr. Coleridge said that, in his opinion, the Committee should continue to spend money on well organised and centralised research schemes with the best men available in charge irrespective of cost, that a Malpractices Sub-Committee should be formed permanently to deal with the serious question of malpractices up-country and that some of the large balance at the Committee's disposal should be used in the direction of seed extension and distribution of improved varieties of cotton and in demonstration and propaganda with the object of broadcasting the results of successful research amongst the cultivators.

The Vice-President said that he had great pleasure in supporting generally what Mr. Coleridge had said and on behalf of the Committee thanked him for his most interesting speech. He thought that everyone would agree that it was time for the Committee to take stock of its work, and to endeavour to arrive at a definite policy for the future. With reference to the remarks made by Mr. Coleridge regarding criticism of the Committee from the cotton trade, he also had been receiving similar criticism from his colleagues of the Bombay Millowners' Association. Such criticisms were due, no doubt, to the fact that the Committee had not, as Mr. Coleridge had said, sufficiently advertised its work and had not let the

public know exactly what has been done as far as research work is concerned. He agreed that more should be done in this direction in the future. As regards the research schemes he still felt that in spite of the five hours' discussion that was held yesterday the schemes had not yet been sufficiently discussed and that resolutions had been adopted in a somewhat hurried manner. Had there been greater time and more opportunity to study the schemes, he considered it would have been advantageous. Mr. Coleridge had referred to the failure of the Indian Central Cotton Committee to check malpractices. Doubtless, the Committee had not achieved much in this direction but he did not agree that they had failed entirely in their task. It appeared to him that some people in India had a real fondness for malpractices and no sooner was one malpractice put a stop to, than another was devised. For instance in the Hubli and Gadag tracts, where the Cotton Transport Act had been put into force and enforced strictly, merchants could no longer import inferior cotton or waste for mixing. Not being able to do so, they had now resorted to the practice of watering cotton before pressing and mixing cotton seed with cotton. The Committee had already devised two Acts, the Cotton Transport Act and Cotton Ginning and Pressing Factories Act—which, in his opinion, had not been made use of as fully as they ought to have been. If these Acts were properly enforced, strictly followed and every lapse in their working brought to the notice of the Committee and if Provincial Governments took steps to see that the Acts were strictly obeyed, he was sure that much good would result. He fully agreed with Mr. Coleridge when he said that the Committee should not confine its activities to merely formulating research schemes but should put the results of its work to practical utility. Some such feeling was echoed in the report of those members who had visited the Institute of Plant Industry, Indore, and he thought the Committee would agree that it was little use spending money on research work if the successful results of these researches were not to be made available to the public generally. As regards distribution of seed, he considered that to be a very important matter and he fully agreed that the Committee should do everything possible to assist Agricultural Departments or co-operative societies to help in the wider distribution of pure seed.

Rao Bahadur Bhimbhai Ranchodji Naik said that he wanted to emphasise one point, namely, the importance of research towards increasing the yield of cotton. He did not think sufficient attention had hitherto been paid to this side of the question. Unless the yield in cotton was increased the economic difficulties of the agriculturists were not likely to be alleviated. He might give one or two instances in the Presidency to which he belonged. If the returns of the Revenue Department during the last thrity years were carefully gone through, it would be found that instead of the yield of cotton in the same cotton growing districts going up, it had gone down. He did not wish to minimise the importance of length of staple and quality, but, at the same time, he desired to emphasise that unless there could be an appreciable increase in the yield of cotton, the condition of the cotton grower would never be greatly improved. Recently, he had read the report

of one district, namely, Surat District, where cotton was a most important crop. In the year 1896 the average yield of cotton in that district was 7 to 17 maunds per acre but it had gone down to 6 maunds per acre (official figures). He requested the members of the Agricultural Research Sub-Committee and all others interested to pay greater attention to this side of the question in future.

Rao Bahadur Deshpande said that he thought Mr. Coleridge was quite justified in criticising the past record of the Committee in regard to checking malpractices. For instance, he had reported serious cases of watering of cotton to the Secretary a few years ago but no action appeared to have been taken and no improvement had taken place. He also agreed that the Committee would be justified in spending money on seed distribution and on propaganda as this work would be of the greatest benefit to the agriculturists.

Mr. Anstead said he thought that the Committee owed a vote of thanks to Mr. Coleridge for his candid criticism of its research schemes and he hoped that criticism would be accepted in exactly the same spirit in which it had been offered. He himself had served on the Agricultural Research Sub-Committee for many years and he found that what generally happened was that the Sub-Committee was asked to consider a mass of schemes and to arrange for the expenditure of a very large sum of money on the first afternoon of the meeting and within the short space of five or six hours. Now some members had arrived at the meeting after three nights in the train and he did not think these were ideal conditions under which to examine critically and carefully so important a subject as the research work carried out by the Committee. He would ask that in future the Agricultural Research Sub-Committee should meet at least two days before the full meeting so that it could go through in detail and give sufficient time to these important subjects. He was of the opinion that the Committee should never give support to any scheme, whether large or small, unless it was convinced that there was a man available to be put in charge of that scheme who was really thoroughly capable of carrying it out successfully. Again, he felt strongly that the Committee itself should engage these men to take charge of its schemes. The Committee itself should advertise the posts, should select the men, and should arrange what they were to be paid. This should not be done as at present through Provincial Governments. The Committee must get the best men available and pay whatever salary is required to obtain them. He urged the Committee to overhaul its policy of research on these lines.

Mr. Milne said that he also welcomed Mr. Coleridge's criticisms as an attempt to get put on paper exactly what the Committee was doing, and to examine the utility of that work critically. Mr. Coleridge had criticised the Punjab Entomological Scheme and had said that he doubted whether it could be of real benefit to the country. The Punjab Entomological Scheme was an investigation into the life history of the pink boll-worm with the object of discovering why that pest is of considerable importance in the South-eastern end of the Punjab but is not so in the main cotton-

growing tract of the Canal Colonies. From the information which had already been collected, it had been shown that the reason was mainly a climatic one. The point of importance was that, as a result of this investigation, it was now clear that money should not be misspent on trying to prevent this pest coming from the South-eastern end of the Punjab into the Canal Colonies. With regard to the Punjab Botanical Research Scheme, the reason why he advocated its continuance was that it was doing valuable work. The Cotton Research Botanist in the few years he had been at work had got hold of some promising varieties, but it was essential that these should be thoroughly tested before they were sent out to farmers and time was needed. The Cotton Research Botanist was also collecting very valuable data regarding the cause of the partial failures of American cotton which take place periodically in the Punjab. Mr. Coleridge had laid some stress on work on *deshi* cottons. He might inform him that when he started work twenty odd years ago, he dealt with both American and *deshi* cottons but what he aimed at was to obtain a greater profit per acre for the farmer. Of all the selections and crosses that were made among *deshis* and American, the farmers chiefly asked for the American varieties and the area of American cotton in the Punjab rose from practically nil in 1908 to about a million acres in 1922. The only possible reason for that development was that the farmer was getting more money per acre out of the American selection than he was getting out of any other cotton he was growing.

Rao Saheb Krishna Menon said that he considered too much attention had been given in the past to the scientific side of the Committee's work. There were other problems, *e.g.*, seed distribution, extension, improvement of marketing, etc., which he hoped the Committee would now devote more time and money to solving. These questions should be taken up simultaneously with research.

Dr. Burns said that he wished to thank Mr. Coleridge for his generous criticism which was both timely and useful. He hoped such interest on the part of trade members in agricultural research would continue and that these members would clearly define their requirements so that research workers would know along what lines to work. The obtaining of results was merely a matter of time. None of the Committee's researches were absolutely finished but he was convinced they were sound and some of them were very promising indeed. He would like to point out, with regard to Mr. Coleridge's proposal to publish a report on the Committee's agricultural research schemes, that there would be a certain difficulty in publishing unfinished work and that publicity and broadcasting were only useful when results were obtained and ready for extension. He felt that there was a gap in propaganda work which the adoption of Mr. Coleridge's proposals would go a long way towards closing. With regard to the centralisation of research, he trusted the Committee would not be led away by that proposal merely as an ideal. He was absolutely in agreement with any proposal to co-ordinate research but as regards centralisation local conditions were so varied and uncertain that such proposals must be considered solely on their merits and not laid down as to be accepted on general principles. With regard to yield,

he considered this question should be taken up with regard to India as a whole and thoroughly investigated.

Mr. Main said he would like to thank Mr. Coleridge for his very valuable criticism in which there were useful and fundamental suggestions. To refer to one of them, Mr. Coleridge had definitely made the proposal that the Committee should confine itself to work on *deshi* cotton to the exclusion of work on exotics. Speaking for the Bombay Presidency proper, he agreed with him, but speaking for Sindh the position was rather different. The Bombay Government had quite recently received a communication from the Karachi Chamber of Commerce pointing out the extreme danger to the country if, under Barrage conditions, Sindh *deshi* cotton were to be extended and cultivated up to the limits of the new irrigation system. Therefore, he did not think one could speak dogmatically on such a subject and that the policy to be followed depended entirely on local conditions and circumstances. Mr. Coleridge had raised the question of yield *versus* quality. This was an old issue. In the early days of the Department of Agriculture, most agricultural officers had devoted their attention to yield rather than to quality. An example was to be found in Dr. Clouston's work in the Central Provinces where he had worked entirely on Roseum cotton which was a high yielding but a very low-stapled cotton. He had therefore given the cultivator more profit per acre but had lowered the quality of the cotton in his Province. It appeared to him that it had been rather lost sight of in the discussion that a great deal of work had already been done on increasing the outturn as distinct from the quality of cotton. Even at present the Central Cotton Committee's schemes in the Bombay Presidency were mainly devoted to increasing yield. The wilt scheme at Dharwar was definitely designed to try and produce a higher yield per acre by eliminating disease and similarly both the schemes at Surat had that object in view. He wished to endorse very strongly the remarks made by Mr. Anstead with regard to what should be the basis of reorganisation of all the research work of the Committee, namely, the staff. He thought the Committee should engage the best staff available, should pay whatever was required to get them and should retain them under its own direct control.

Mr. Howard said that he was in complete agreement with all Mr. Coleridge's suggestions. He would also like to support what Rao Bahadur Bhimbhai Naik had said about the importance of increasing the yield of cotton. He had devoted a lot of work to this aspect of cotton improvement at Indore and he could confidently state that, if the results obtained there were generally applied, at least in the black soil areas, it would be possible to double the cotton yield in less than twenty years. He was also convinced that the Indian cotton problem was essentially a *deshi* problem and that there were enormous possibilities in the Improvement of the *deshi* cottons.

Sirdar Ujjal Singh said that such constructive criticism as had been offered by Mr. Coleridge had always a stimulating effect. He said there were two or three very big problems in the Punjab which required to be

tackled seriously. The greatest problem for the last two or three years in that province was the partial failure of the cotton crop and if, by spending money on research or by any other means, the Committee could find means to prevent these failures, the Cotton Committee would earn the gratitude of the whole province.

Sir Purshotamdas Thakurdas said he understood there were a good many references in Mr. Coleridge's speech to subjects which would come up for discussion later. He, personally, was not surprised at Mr. Coleridge's criticism of the Committee's activities in the direction of agricultural research and the support which such criticism had received from the non-technical members of the Committee. The trade members had been very conservative with regard to research work from the inception of the Committee and they had been assured that the work was on right lines but that results could not be expected for a considerable number of years. He was interested to see that Mr. Anstead also endorsed Mr. Coleridge's criticism and it was to be noted that there was some difference of opinion even amongst the experts on the Agricultural Research Sub-Committee. On glancing through the report of that Sub-Committee, he had noticed that one scheme was to be closed down, *i.e.*, the Dharwar Cotton Breeding Scheme on Upland American Cotton. The rest of the report was a recommendation that the other schemes be continued for their sanctioned period. He did not wish to be impatient and he certainly believed that those who said that the future of Indian Agriculture depended upon research were not misleading the Committee. He however felt that the experts on the Agricultural Research Sub-Committee should have said more about the promise offered by these other research schemes and whether they were being carried out on the correct lines and justified more money being spent upon them. The discussion this morning had shown that there was room for improvement and he would be glad to have each scheme examined thoroughly from time to time by the expert members of the Committee and a complete report on the progress of the work submitted by them for the information of trade members. If the experts differed, he would like to know on what points their differences arose. He was also interested in Mr. Anstead's suggestions for the improvement of the working of the Agricultural Research Sub-Committee and he agreed that meetings of this Sub-Committee should be held more frequently and should be of longer duration in order to enable the research work of the Committee to be adequately discussed. This did not appear to be the case at present. Some members had said in the course of the discussion that the Committee should get the very best men available to take charge of their research schemes, no matter what may have to be paid to obtain them. He could not endorse this view. If other countries could get men for their agricultural research work at reasonable rates, why should it be necessary for this country to pay whatever was demanded for similar work ? He thought there should certainly be a limit to what the Committee should be prepared to offer. Also he considered that, as far as possible, the Committee should get the best man available in India for their research schemes. If it was found impossible to get a man in India they might

have to go outside but an Indian should be employed whenever a suitable one was available. The Committee would only be justified in importing a man from outside India when a case could be made out that the country would benefit substantially by such an importation and that he would be able to train Indians for similar posts in the near future. He hoped that the Agricultural Research Sub-Committee would meet for a longer period in future and that a report would be issued once a year over the signature of all the expert members of that Sub-Committee that they had examined *each* of the Committee's research schemes and that the money spent upon them was being profitably laid out and utilised to good purpose.

The resolution (No. 8) was carried unanimously.

Mr. Coleridge moved the following resolution :—

RESOLUTION 9.—"That the Central Cotton Committee approves the formation of a permanent 'Malpractices Sub-Committee' of the Indian Central Cotton Committee to deal with all references to such malpractices and abuses as are adversely affecting Indian cotton. This Sub-Committee should consist of the Vice-President and six members of the Indian Central Cotton Committee with power to co-opt additional members whether members of the Central Cotton Committee or not representative of different sections of cotton interests in India. The Central Cotton Committee further recommends that this Sub-Committee should consider, as early as possible, the efficiency of all measures, legislative or otherwise, already adopted to check these malpractices and should examine in detail the advantages of legislative measures towards the licensing of gins and presses in India in this connection."

Mr. Palairet seconded the resolution.

Mr. Anstead said that he supported the resolution, but would like to impress upon the Committee the necessity of examining every other means of checking malpractices before having recourse to legislation, which should be avoided at all costs. In Madras he had had bitter experience of legislation both with regard to the Cotton Pest Act and the Cotton Transport Act and even despite the help and interest shown by the Committee, the Cotton Transport Act had been amended against the wishes and opinion of the Committee and the Agricultural Department.

Sirdar Ujjal Singh supported the resolution and said he wished to endorse the remarks made by the previous speaker. He realised that these malpractices did exist and that they should be checked but he was of the opinion that they took place in the villages and not in the ginneries. It would therefore be futile to introduce the sort of legislation which was contemplated. Such legislation would only penalise the gin-owners and would not check mixing which took place outside the factories. In the Punjab, Punjab-American was also grown mixed with *deshi* in the fields and he did not believe that the admixture could be less than 5 per cent. in 30-40 per cent. of the cultivators' fields. The cotton, when it reaches the ginneries was already mixed to a considerable extent.

Mr. Coleridge said that his proposal did not contemplate that the licensing of gins and presses should be introduced immediately. The present working of the Cotton Transport Act and the Cotton Ginning and Pressing Factories Act might be examined in the first place and any other avenue of checking malpractices fully explored. Then a full report should be submitted to the Committee. There was no intention to recommend additional legislation if it could be avoided.

The resolution (No. 9) was passed unanimously.

The President moved the following resolution :—

RESOLUTION 10.—"That the following members be appointed to form the Malpractices Sub-Committee :—

Mr. S. D. Saklatvala,
Major W. Ellis Jones,
Sir Purshotamdas Thakurdas,
Mr. G. C. R. Coleridge,
Rao Bahadur Bhimbhai Ranchodji Naik,
Mr. T. G. Ralli, and
Mr. T. F. Main."

Mr. Howard seconded the resolution which was carried unanimously.

Mr. Coleridge moved the following resolution :—

RESOLUTION 11.—"That, in view of the extreme importance of the supply of seed of established improved varieties of cotton being made readily and cheaply available to the cultivators, the Central Cotton Committee invite Local Governments and Directors of Agriculture to submit proposals based on local requirements, whereby the Committee could assist, by the provision of staff or funds—or in any other way in the wider distribution of the seed of improved varieties of cotton to the cultivators."

Mr. Palairet seconded the resolution.

Mr. Anstead said that he would like to support this resolution but wished to point out that it did not go beyond help in the distribution of seed. The distribution of seed was only one item in the extension of improved varieties and there were other matters in which he thought the Provincial Directors of Agriculture would be only too glad to receive assistance from the Committee. In Madras they were making rapid strides with an organisation for purchasing seed and marketing Cambodia cotton. He hoped to be very soon in a position of having a certain number of bales of absolutely pure Cambodia cotton produced, ginned, pressed and made ready for the market by a co-operative organisation which had been formed for the purpose of growing, purchasing and marketing this particular crop. He asked if he would be justified in approaching the Indian Central Cotton Committee to buy that cotton or to assist in its sale so as to get for him the full price which that cotton should bring in Bombay or any other large market. At present the cultivators cannot get the full value for improved cotton and, until they did, it was impossible to impress upon them the full advantages of

growing such cotton carefully. He welcomed this resolution as being a distinct step forward in helping Provincial Agricultural Departments to get on with cotton improvement work.

Mr. Plymen said that he also supported the resolution. He thought there was great scope for assistance from the funds of the Committee in the distribution of seed. He himself had a certain fund at his disposal for the distribution of seed in the Central Provinces and Berar and about 267 seed depôts had been started this year to buy in the seed at harvest time and sell it at sowing time. If reasonable care was taken, there should be no loss on such transactions. It might possibly happen that his scheme might require expansion and therefore a grant from the Committee to assist in such work would be extremely useful.

Mr. Main said that, in Bombay, they were in exactly the same position. They had several seed schemes in progress and he had a Personal Ledger Account which was used largely for buying in seed at harvest time and holding it for sale. On account of the risk involved in giving advances to cultivators before the crop is harvested (*i.e.*, on the standing crop) his Government was considering whether they could continue such a practice. Hence he would welcome very much some new financial agency on the lines suggested in this resolution.

Mr. Milne said that he strongly supported the resolution and would be very glad to avail himself of the assistance which it promised.

Mr. Coleridge said that the Committee would have to be very careful that this resolution was not made a means whereby Provincial Governments could be relieved of their responsibilities. His idea was that Provincial Directors of Agriculture should put forward schemes for seed distribution upon which, if approved, the Committee should be prepared to spend money. However, it must always be kept in mind that there was no intention of relieving Government of their proper functions.

Mr. Sane said that although he welcomed the resolution, he did not know exactly how it would work. His experience in Baroda was that there was considerable difficulty in recovering money so advanced to *ryots* individually. He did not know precisely what procedure was proposed to recover money at the end of the season when the cotton crop was harvested. He suggested that it would be better if such money was given through some sort of organisation like co-operative societies. There would then be some guarantee of money being returned without any cumbersome procedure of interference by Government.

The resolution (No. 11) was carried unanimously.

Mr. Coleridge moved the following resolution:—

RESOLUTION 12.—"That the Central Cotton Committee feel most strongly that the practical value of any successful research accomplished as a result of schemes financed from the Committee's grants depends entirely on these results being widely broadcast and subsequently incorporated in general agricultural practice. The Committee therefore consider that, as soon as any of the Committee's research schemes produce results which constitute a definite advance

to cotton growing for any particular area or tract, the Committee should take steps to discuss, in consultation with the Provincial Cotton Committee, Divisional Cotton Committee or Durbar and the local authority directly responsible for agricultural development, the best methods of extending these results in practice and, in particular, what practical assistance would be most welcomed from the Committee for the work in question."

Mr. Palairet seconded the resolution.

Mr. Anstead said he welcomed this resolution which was a friendly hand held out to Provincial Agricultural Departments. He did not quite see how it would be given effect to as trained men would be required for such work but he suggested that useful assistance could be given by the supply of such things as cinema outfits, films, etc., to be used for propaganda purposes.

Dr. Burns said that he considered that Mr. Anstead was looking on the resolution from a different point of view than that held by the proposer. He did not mean that help should be given in general agricultural propaganda but that provision should be made for any special organisation which might be required for a given time for a special purpose. It was not necessary to have a predominatingly agriculturally trained element in such an organisation.

Mr. Plymen said that he supported the resolution but was not quite clear as to how far it was intended to go. He would like to know if it was to be confined to purely agricultural demonstrations or whether it could be extended to such things as the marketing of improved varieties of cotton. He would instance the case of the Central Provinces Botanical Research Scheme in particular wherein future work would largely be on the lines of organising marketing of the improved variety already evolved by research. Would the Committee permit him to revise this scheme so as to employ more of the staff at present engaged on botanical work on such market organisation ? There was not much chance of any loss being incurred by the Committee if this were done and, if a wider view was taken of the scope of the resolution, he thought such work might be legitimately included.

Mr. Coleridge said that he had not specially considered such matters when the resolution was framed but if Mr. Plymen would submit a definite scheme he could assure him it would be considered most sympathetically.

The resolution (No. 12) was carried unanimously.

IV. *Report * of Agricultural Research Sub-Committee on new grants.*

The President moved the following resolution :—

RESOLUTION 13.—" That the Agricultural Research Sub-Committee's Report on new grants be adopted."

Mr. Howard seconded the resolution which was carried unanimously.

* Appendix VIII (page 100).

V. *Report* of Agricultural Research Sub-Committee on the Research Scholarship Scheme of the Indian Central Cotton Committee.*

The President moved the following resolution :—

RESOLUTION 14.—" That the Agricultural Research Sub-Committee's Report on the research scholarship scheme of the Committee be adopted."

The Vice-President seconded the resolution which was carried unanimously.

VI. *Report† of Agricultural Research Sub-Committee on Research Scholars.*

The President moved the following resolution :—

RESOLUTION 15.—" That the Agricultural Research Sub-Committee's Report on Research Scholars be adopted."

The Vice-President seconded the resolution.

Sir Purshotamdas Thakurdas said that he noted from the report that the amounts of the two scholarships to be awarded in Cotton Marketing and Economics in the Punjab had been fixed at a lower rate than the usual amount given by the Committee for its scholarships in the past. As the whole question of the research scholarship scheme of the Committee had been referred to a Sub-Committee for report at the next meeting, he did not understand why any steps should have been taken with regard to these special scholarships at this time.

The Secretary pointed out that these two scholarships had been sanctioned at the last meeting of the Committee and did not fall within the scope of any future examination of the research scholarship scheme. The scales proposed were specially suggested by the Director of Agriculture, Punjab, as being appropriate to the peculiar conditions under which these scholarships were to be awarded.

Sir Purshotamdas Thakurdas said that he could not forget the complaint so often heard that people with special qualifications required were not available in the country and yet in this case economy was sought for in the training of young men for specialised work. He did not wish this proposal to pass without having it put on record that he did not agree with any reduction of the amount of the Committee's scholarships.

Mr. Milne said that these were two special scholarships and out of the run of the ordinary scholarships granted by the Committee. He had raised the question at the last Committee meeting whether he could get two students trained in cotton marketing and his suggestion was kindly agreed to by the Committee. In this case he had to consider not only the training of these men but also their future employment. As regards training, the Punjab University had very kindly agreed to allow the students selected for these scholarships to join the M.A. Economics course for a year's preliminary training and the Chairman of the Board of Economic Enquiry in the Punjab had consented to give them facilities to take part

* Appendix IX (page 100).

† Appendix X (page 100).

in any current work of economic investigation that might be going on. The remainder of their period of training would be spent under the Professor of Agriculture at Lyallpur. With regard to their future employment, he had been fortunate enough to obtain the consent of the Punjab Government to these two selected scholars being given posts in the Punjab Agricultural Department immediately. The Government of the Punjab would pay their leave and pension contribution during their three-year training period and, on its completion, these students would not find that they had lost seniority in the Department as a result of taking this specialised course of training. The rates of scholarship proposed by him were so calculated that when the training period was over, these students would fit exactly into the normal grade in the Agricultural Department to which they would be appointed before entering on their special training in Cotton Marketing and Economics. In short these were not ordinary scholarships but periods of special training to two lads who will now join the Agricultural Department.

The resolution (No. 15) was carried unanimously.

SUBJECT 21.—*Report* * *of the Standing Finance Sub-Committee.*

The Vice-President said that members would notice that the Standing Finance Sub-Committee had decided to convert a portion of the Government securities held by the Committee into long-dated Municipal bonds bearing higher rates of interest. The conversions already made had increased their annual income by about Rs. 3,000 but, as these long-dated bonds had to be purchased at a premium and were redeemable at par, the Sub-Committee had at the same time sanctioned the institution of a Securities Sinking Fund for which about Rs. 1,000 would have to be set aside annually. The Sub-Committee had also examined the question of the Annual Financial Returns to be submitted by the Institute of Plant Industry, Indore. The Institute had two sources of income, namely, the Committee's grant and also contributions from adherent Indian States in Central India. It was not convenient for the Director to maintain two separate sets of accounts under each of these sources of income but the Sub-Committee had felt that they must insist upon the Annual Return under Rule 15 of the Cotton Cess Act being duly submitted with regard to the grants made by the Committee to the Institute. A solution had been arrived at whereby the Committee's contribution should be ear-marked for certain definite items of expenditure in future and the other items should be defrayed from the other sources of income. The net balance shown at the close of the financial year would be credited as an opening balance to the Committee's account in the succeeding year. This arrangement was subject to the approval of the Board of Governors of the Institute. Another matter dealt with by the Sub-Committee was a request by the Government of India that, in future, the wholetime expert on agricultural matters on the Council of Agricultural Research should be an *ex-officio* member of the Central Cotton Committee. The Sub-Committee had considered that there was no objection to the acceptance of this suggestion. The Standing Finance Sub-Committee had

* Appendix XI (page 101).

also examined the question of the representation of the Indian Central Cotton Committee on the Board of Governors of the Institute of Plant Industry, Indore. At present, the Committee were entitled to three representatives on the Board of seven members and these three Committee's representatives had to be chosen from a panel, consisting of the President, Vice-President, Secretary and Sir Purshotamdas Thakurdas. The Sub-Committee felt that it was most essential that the Committee should always be fully represented at meetings of the Board of Governors and they therefore proposed to increase the panel to include all the members of the Standing Finance Sub-Committee. In this way, there would be considerably less difficulty in ensuring full representation at meetings of the Board of Governors of the Institute.

The Vice-President moved the following resolution :—

RESOLUTION 16.—" That the Report of the Standing Finance Sub-Committee be adopted ."

" That the revised estimates for 1929-30 as now amended be sanctioned."

" That the budget for the pay of Government Officers for 1930-31 be approved ."

" That the Auditors' fee for 1929-30 be fixed at Rs. 1,000 ."

Mr. Coleridge seconded the resolution which was carried unanimously.

The Vice-President moved the following resolution :—

RESOLUTION 17.—" That the President, Vice-President and Secretary of the Indian Central Cotton Committee, Sir Purshotamdas Thakurdas and the members of the Standing Finance Sub-Committee of the Indian Central Cotton Committee should form a panel from which three should represent the Committee at meetings of the Governing Body of the Institute of Plant Industry, Indore ."

Mr. Coleridge seconded the resolution which was carried unanimously.

Mr. Palairet moved the following resolution :—

RESOLUTION 18.—" That the Central Cotton Committee approve of the Standing Finance Sub-Committee's decision that, in future, the Committee should not limit their expenditure to pure agricultural and technological research but should be competent to devote energy and funds to extension, demonstration and propaganda work with the object of establishing the results of their successful research schemes in the general agricultural practice of the cotton growing tracts. If the provision of section 12 (2) of the Cotton Cess Act in any way precludes the Committee from extending its activities or utilising its funds for such purposes, the Government of India should be requested to amend the Act in order to give effect to the proposal contained in this Resolution ."

He said that he had submitted these proposals to the Standing Finance Sub-Committee and, as would be seen from their report, the Sub-Committee had approved of his suggestions. This resolution dealt with

practically the same matters as Mr. Coleridge had brought up in his resolutions but from the financial standpoint it was essential that the Committee's research work should be carried to its logical conclusion, *i.e.*, that any successful results obtained from research should be carried out and tested in the districts and ultimately introduced into general agricultural practice. Until this was done, he felt that the Committee's duties and responsibilities could not be considered to be ended. The Committee had a large reserve of funds and he could see no justification for maintaining such a reserve when money should be spent in embodying the results of the Committee's research in a practical form.

The Vice-President seconded the resolution and said that it was clear that the full benefit of the Committee's research work would not be felt unless the successful results obtained thereby were extended in the cotton growing tracts. He personally thought that the provision of section 12 (2) of the Cotton Cess Act in no way precluded them from devoting money to such work. This section laid down that the funds of the Committee should be used in "promoting" research and that was precisely the intention of the resolution. If there was any technical objection, he did not consider the Government of India would object to the Act being suitably amended.

Sir Purshotamdas Thakurdas supported the resolution and said he was glad that this further step had been suggested.

The resolution (No. 18) was carried unanimously.

SUBJECT 15.—*Cotton Statistics.*

(a) *Cotton Forecasts.**

The President said that, on the recommendation of the Committee, the Government of India had taken steps to improve the accuracy of the Fifth Supplementary Cotton Memorandum and had received a most satisfactory response from various Provincial Governments and Indian States in this connection. The States of Central India and Rajputana had not yet fully responded to the Government of India's appeal to supply the supplementary information required in April, but he hoped that they would also come into line before next cotton season.

Dr. Meek said that he endorsed the President's hope that those areas which had not yet come into line with regard to supplying the additional information required would do so next year. He would be glad if members could suggest any other areas from which such information would be available and useful and he would arrange to request them to furnish it.

Mr. Howard said it would be a very good thing if Dr. Meek would write round to the Central India States from whom information has not yet been received and ask them to furnish it. He was sure, if that was done, this necessary information would be quickly supplied and he was

*Appendix XII (page 118).

willing to help in persuading States of the importance of acceding to this request.

(b) *Comparison* of press returns with cotton forecasts.*

The President said that the Secretary's note was largely for information and showed that there could be no doubt as to the value of press returns in checking Provincial cotton forecasts. There were still large discrepancies apparent which indicated that there were important factors causing errors in the forecast figures in most Provinces which had not yet been fully accounted for.

Mr. Main said that large discrepancies were to be found in the Bombay Presidency figures this year which were not satisfactory. In Gujerat, there was a difference of 78,000 bales between the forecast and the press returns. He concluded that the effect of the frost which seriously affected this tract was largely responsible for this difference by causing the crop forecast to be considerably under-estimated. Also he did not consider the area figures were as accurate as they might have been. In the Broach district and in Khandesh the area estimates were also, in his opinion, the main source of error. Coming South towards the Deccan, he considered that the discrepancy shown was due to the anna valuation being too high. There was also a big discrepancy in the Sind figures which, to his mind, was largely due to imports for pressing from outside Sind itself. He was taking steps to try and improve the forecast figures and would draw the attention of reporting officers to the discrepancies and their causes in the hope that more accurate returns would be available in future.

Mr. Milne said that in the Punjab, the forecast figures were far from agreeing with the press returns. However, he wished to call attention to the great variations in weights of bales which, he said, ranged from 340 to 580 lbs. He thought this might explain partly the discrepancies noted. Also there were large imports of cotton from Indian States on the borders of the Punjab. Only five of these states submitted press returns and about nine made no report of this nature. He thought that if information could be got regarding the crops and movements of cotton in these States and also similar figures from the North-West Frontier Province, the figures for the Punjab could be made more accurate. The re-establishment of Inland Trade Returns would also assist him to get at the source of the errors. He admitted however that the crop in the Punjab had been considerably under-estimated last year.

Mr. Plymen said that, in the Central Provinces, the Nagpur area was most at fault and the outturn was greatly in excess of expectation. He attributed this largely to the effect of favourable late rains which resulted in a second growth of the crop. The Berar figures were satisfactory being only 5 per cent. out but, taking the Central Provinces as a whole, there was a general under-estimation of the crop which could only be due to the persistent pessimism of the reporting agencies. He noted that the

*Appendix XIII (page 189).

total figures for the whole of India were only 1 per cent. out and he considered this a matter for congratulation.

Sir Purshotamdas Thakurdas said that, in view of Mr. Plymen's statement, he would like to ask Dr. Meek whether the estimate was of full pressed bales only or of the total crop grown. If it was of the total crop grown, non-factory consumption would have to be added and this would amount to anything from 500,000 to 1,000,000 bales. In that event, the crop would appear to have been very considerably under-estimated.

Dr. Meek said that the analysis submitted was most interesting and the figures given for the different Provinces were very instructive. If Bombay appeared to be pessimistic, in other parts optimism was apparent. In reply to Sir Purshotamdas Thakurdas, the figures given were estimates of the total crop grown. It was not possible to expect the figures to agree and the general indication was that crop estimates were not accurately made. These statistics had not been collected for a long time and when a new set of figures became available from the Inland Trade Returns of movement from one trade block to another, there would be much better information available for verifying the present figures and for deciding where the sources of the discrepancies lay. These new statistics would also give a good means of deciding whether the crop was regularly under-estimated in any particular tract year after year and would enable Directors of Agriculture to form more accurate estimates of their crop.

3rd day—18th July 1929.

SUBJECT 11.—*Mixing* of Punjab-American Cotton.*

The Vice-President said that this most important subject had been discussed by the Committee on many previous occasions. A complete history of the question had been prepared by the Secretary and was given as an appendix to the papers before members. Various aspects of the problem had been considered by the Committee and numerous suggestions for its solution had been presented from time to time. The present position of the crop was most precarious and everyone agreed that its deterioration had been most rapid. Another fact upon which there could be little or no doubt was that the serious deterioration which had taken place and which had resulted in the practical elimination of the Punjab-American crop was due largely to the malpractice of mixing. Mixing with *desi* seed originally appeared to have been confined to the ginneries but, from the report presented by the Director of Agriculture, Punjab, it was evident that mixing in the fields was on the increase. At the last meeting of the Committee it was decided to bring the seriousness of the present position to the notice of the Punjab Government. Their reply, which was before members, stated that they were not prepared to take any action except in the interests of the agriculturists as it might otherwise react adversely on prices. He would submit that any action which could be taken to check mixing would necessarily be in the interests of the growers and he would suggest that the matter be again referred to the Government of the Punjab for consideration. The

* Appendix XIV (page 123).

Director of Agriculture, Punjab, had also made certain suggestions for improving the present position. He proposed to replace the variety 4F by 289F but it was very doubtful if this proposal would find acceptance among the trade members of the Committee. Mr. Milne had also proposed to institute a testing house and he was sure the Committee would like to have more detailed information as to how many such testing houses would be considered necessary, what duties they would be required to perform and in what way would their work be conducted and carried out. In any case some definite conclusion as regards the future policy of the Committee with regard to the Punjab-American crop must soon be arrived at. Was the Committee prepared to allow this crop to disappear entirely from the Indian Market ? If the seriousness of the present position is fully realised, it must be admitted that consumers will not touch this cotton unless the malpractice of mixing is checked at an early date. Various suggestions for stopping this malpractice had been considered in the past. The licensing of gins and presses was again hinted at during this meeting. The Committee had, on several previous occasions, recommended legislation of this description but it had never been able to make up its mind whether the time was ripe for the introduction of such a measure and what form such legislation should take. Before any such drastic action was decided upon, it was generally agreed that every other avenue of improvement should be thoroughly and completely investigated. It had also been decided that the remedy should be left in the hands of the trade as, if there was no demand for mixed cotton from consumers, it would not pay the middleman or merchant to mix and the malpractice would cease automatically. However, this had resulted in a more or less vicious circle as, when the suggestion was made, it was pointed out that at present it was practically impossible to get pure Punjab-American cotton. There was no supply of unmixed cotton available whereas there was plenty mixed stuff and the consumer was therefore bound to take what he could obtain on the market. In his own experience, he had found that unless a firm had its own ginning factory—and every mill and exporter cannot afford to have that—there was very little chance of getting unmixed Punjab-American cotton on the open market. Another suggestion was to tighten up the working of present legislative measures, *e.g.*, the Cotton Transport Act and the Cotton Ginning and Pressing Factories Act and to find out whether an improvement could be effected by this means without recourse to additional legislation. When the Cotton Ginning and Pressing Factories Act was first proposed, the Committee had suggested that, in this very Act, there should be an enabling clause which would permit Provincial Governments to introduce the licensing of gins and factories if and when they considered such action to be desirable. For some reason or other, this clause was dropped from the Act. Some trade associations, notably the Karachi Joint Cotton Committee, had strongly recommended legislation in the direction of licensing of gins and presses as the only efficient way of dealing with this problem. He felt there was a considerable body of opinion in favour of such a measure and hoped that the discussion at this meeting would result in some definite action being decided upon.

Mr. Coleridge said that the Vice-President had expressed the view that the Punjab-American crop would shortly cease to exist. In his opinion, it had already ceased to exist and he would give instances in support of his contention. In 1921-25, his own firm in Karachi dealt in five standard types of Punjab-American cotton, differing one from the other by about Rs. 10-12 in quality. In other words the highest type was about Rs. 60 superior to the lowest. During the present year, type 1, *i.e.*, the highest was not available anywhere. A hundred bales business was done in type 2, a fair amount in type 3 and more business in types 4 and 5. Type 2, when required was not available anywhere in the Punjab at any price whatever. He was sure that, on an average, the Punjab-American crop had deteriorated Rs. 40 per khandi during the past four years. Secondly, only a few days ago he had received word from Karachi that his firm's type 4 was being offered at Rs. 300 per khandi, *i.e.*, roughly Rs. 10 off Broach. In previous years no Punjab-American cotton could be obtained " off " Broach and this type was dealt in at Rs. 10-50 " on " Broach. He bought finally at Rs. 260, *i.e.*, Rs. 50 " off " Broach. Thirdly, he had received numerous letters from spinners and their agents stating that, in their experience, Punjab-American had been deteriorating so fast that it now gave no better test than Khandesh cotton. Crores of rupees had been lost over this crop and it was now a drug in the market as nobody wanted it. He regretted that he had no concrete suggestions for improvement of the present position, but the situation would have to be faced. It might be advisable to concentrate attention on the *desi* crop. He had found first class *desi* cotton which would spin nearly 20's and, at times, had been able to ship *desi* cotton against some of his firm's lower Punjab-American types. If the Committee decided that the Punjab-American crop was a complete failure, it should concentrate on the *desi* crop or, if not, they must come back to legislation and introduce licensing of gins and presses as soon as possible. He would be delighted if any other palliatives could be put forward but he could not see any other way of dealing with the situation.

Mr. Milne said he was interested to hear Mr. Coleridge's remarks on the tremendous losses which farmers were sustaining through the degeneration of the Punjab-American crop. He thought that two quite different things were being mixed up in the discussion, namely, the consequences of the recent sequence of partial failures of the Punjab-American crop due, in his opinion, to the effect of hot, dry, desiccating winds, which resulted in the fibre of the Punjab-American cotton being even worse than any *desi*. The other factor was undoubtedly the mixing of the Punjab-American cotton with *desi* varieties. He already had a Committee of experts investigating the causes of these failures of the Punjab-American crop and he anticipated that, in two or three years' time they would have got to the bottom of this problem. If the causes of the failure turned out to be as he thought, it would mean that a hardier type of cotton must be obtained. Also the question of shelter hedges would require to be studied as, in every single failure year, they had found that the crop did not suffer nearly so acutely where it was protected from the wind by fields of sugar-cane, buildings or any other form of

wind-break and shelter. One interesting fact was that, in spite of these failure years, the acreage of Punjab-American cotton in the Punjab in 1928-29 was 960,800 acres and, as the grower got whatever kind of seed he desired, it appeared obvious that he still considered it more profitable to grow Punjab-American cotton in preference to *desi*. If the Committee were to help the growers, they could not therefore give up their work on the American cottons. No practical suggestions for a solution of the mixing problem had been forthcoming from the Committee and his own proposals for a testing house had been criticised on the grounds that such an institution would not be workable on a large scale. However if, as had been said, the degeneration of the Punjab-American crop was resulting in the loss of crores of rupees to the grower, the Rs. 35,000 of capital expenditure and Rs. 15-16,000 of recurring expenditure for five or six years in order to test his testing house scheme would be a justifiable risk to take. The question of how the testing house would be worked was a long story and he did not propose to inflict it upon the Committee during this discussion. He would put full details before the " Malpractices " Sub-Committee when they came to consider this problem. In the meantime, the Agricultural Department in the Punjab had not been neglecting this matter and had been searching for palliatives to reduce the loss which the zamindar is put to as a result of this mixing. The system of supply of pure 4F seed to growers was being developed steadily and the Department has now about 20,000 acres of land on its Government and grantee farms where pure varieties are grown for seed supply purposes. They were also considering adding to this area by taking over lands on certain Court of Ward Estates and farming these commercially to increase their available supply of pure seeds. They also had about 170 agencies scattered throughout the Province for supplying pure seed and they were constantly adding to this number. He was rather surprised that the zamindars had not taken more to the variety 289F than they had done. This variety had, consistently given on the Departmental farms, a greater outturn and a higher profit per acre than 4F but the fact remained that the demand for it was not increasing. He hoped he would be able to get at the reasons underlying this distaste for the 289F variety. Possibly the hairiness of the seed, which rendered it less suitable for feeding to cattle, and its late ripening habit were objections of the cultivators to growing the variety. He had also made arrangements with the Irrigation Department to furnish him each year, by the 15th December, statements showing the purity of the American cotton crop grown in certain canal areas. If these figures were made public, they would enable spinners to send their agents to purchase cotton at the percentage of purity at which it was grown, should they desire to do so. He had been given to understand that his testing house scheme had been turned down by the Punjab Government on the grounds that it had been authoritatively stated that spinners did not want pure cotton. He could not believe this as he felt certain that spinners would much prefer to know what they were buying, and to make their own mixtures to suit their special purposes. He also thought that spinners would be prepared to give better prices for pure cotton than for mixtures.

Secondly, he had been told that a certain farmer in the Punjab had sent a bale of pure American cotton to Bombay and was there offered a lower price for it than he could have obtained by selling it in the Punjab itself and that this had helped to bring about the decision of Government to drop the testing house. As regards the proposals for licensing of gins and presses, he felt there was considerable opposition to such legislation and, in his own mind, a serious objection was that factory-owners would be held responsible for the sins of other people. If this point could be cleared up and it could be ensured that gin and press owners would not suffer for mixing which had been done outside the factories and beyond their control, the case for licensing of gins and presses would be considerably strengthened. He was quite certain that the Punjab Government would welcome any help the Committee could give in dealing with this mixing problem in the Punjab and would co-operate fully towards arriving at a satisfactory solution of the difficulties which were under consideration.

Mr. Coleridge said that it might be a pure coincidence but his firm had received a bale of pure 289F cotton sent to them by a zamindar of Okara with a request as to what price would be available for such cotton for shipment. The cotton was of fair commercial quality and one of the best spinners in Bombay—who was also a great exporter of Indian cotton—offered to buy this cotton at Rs. 120 on Broach and he thought trade members would agree that this was a very fine price indeed for any Indian cotton, being practically equal to the price of Navsari. On wiring his offer to the Punjab, he was informed that the same cotton could be sold in Okara at Rs. 160 on Broach which is equivalent to the price of African cotton which spins 40's. There was no doubt that this cotton was being bought at this fantastic price in the Punjab merely to mix with 4F. Some person was buying 25 bales of this 289F and 75 bales of 4F and selling 100 bales of 289F and was accordingly getting a much higher price for his mixture than he could possibly hope to do by buying and selling the two cottons separately. This was only another instance of the extraordinary extent to which mixing was going on in the Punjab.

Mr. Hilson said that, if he understood the position rightly, the bulk of the cotton in the Punjab, both American and *desi*, was irrigated. He would like to know if the American cotton was a better yielder than the *desi* cotton. It would appear not and therefore, in his opinion, the arrangements for covering the area with Punjab-American seed must be inadequate. If the Punjab-American yielded better than the *desi*, naturally the amount of American cotton in the mixture would increase provided that the arrangements for the supply of pure seed from year to year were sufficient. He stated that he had a parallel case in his Westerns area where the cotton was all rain-fed. He had been putting out the strain Hagari 25 to replace the ordinary Westerns cotton. Some of this was marketed pure but as soon as a difference in price arose, mixing was resorted to. As a result, a certain proportion of the seed remained pure and a certain proportion was mixed. The Department kept on putting out pure seed annually and gradually the amount of local seed

in the mixture decreased until eventually a very large proportion of the area was under practically pure Hagari 25. Their chief trouble was that the Mungari cotton, grown in the area for which Hagari 25 was not suitable, always provided a source of supply for mixing purposes. In addition they were handicapped by the fact that cotton was brought over from H. E. H. the Nizam's Dominions and mixed with Hagari 25. If the Cotton Transport Act was properly enforced the whole area would become definitely covered with Hagari 25. In the Punjab it appeared that the root of the trouble lay in the fact that the Punjab American cotton was not a better yielder than the *desi* cotton and that the arrangements for the supply of pure American seed were insufficient.

Mr. Milne said that the Punjab farmer got the seed which he desired, whether American or *desi*, and the fact that there were 960,800 acres of American grown in the season 1928-29 indicated that there still were a very large number of zamindars who believed that they got a higher profit out of the cultivation of American cotton than from *desi* cotton. If this was not so, American would not be grown at all, as there was no inducement to cultivate it except the higher profit per acre. As regards seed supply, the Agricultural Department was supplying annually seed for about one-fifth of the total American area and, as cottons multiply twenty fold, any zamindar could, if he cared, sow the whole of his cotton area with Agricultural Department's seed in the second year. Perhaps a difference between the Punjab and Madras was that, in the canal colonies, all the land was not suitable for growing American cotton owing to differences in the nature of the soil. There were also definite limits imposed on the growing of American cotton by the water supply available. For these reasons, a zamindar could not sow the whole of his area with American however much he might desire to do so.

Mr. Thomas said that he could not agree with Mr. Coleridge's suggestion that the Department of Agriculture in the Punjab would be well advised to abandon all further hope of rehabilitating the American crop and to concentrate on increasing the yield of *desi* cotton. He pointed out that, at this stage, there was no justification for assuming that all Punjab-American cotton was no better than 4F. The deterioration of the Punjab-American 4F crop in the field was largely responsible for the recent rapid increase in the malpractice of mixing. He attributed this deterioration very largely, if not entirely, to the effects of attack by "White Fly". The life history of this pest was being worked out by the Entomologist provided by the Central Cotton Committee at Khanewal. The Entomologist's work had now arrived at a stage when he should concentrate his efforts on discovering control and remedial measures so that a comprehensive campaign against this insect pest could be started next year. With regard to the practice of mixing Punjab-American cotton with *desi* cotton in the Punjab, he took this opportunity, as representative of the Empire Cotton Growing Corporation, to put before the Committee a proposal for solving this difficult problem.

The proposal, which was designed to afford the minimum of interference with legitimate trade practices, was as follows :—

To select a large tract such as the Lower Bari Doab Colony whose limits should be prescribed.

To establish cotton experimental stations in sufficient number to conduct a comprehensive variety test with cotton with a view to finding the variety which gives the greatest profit over a period of three to five years.

Having discovered the variety which gives the best average returns, to propagate it on Government Seed Farms and existing large plantations at the fastest rate possible.

During the experimental period, to *investigate* thoroughly the practicability and advisability of legislating against the mixing of different varieties of cotton within the prescribed zone by licensing ginning and pressing factories.

Simultaneously to pave the way for introducing legislation to prohibit the growing of cotton from any seed other than that supplied by or approved by the Department of Agriculture within the prescribed zone.

If the preliminary effort succeeds on the prescribed zone then the practice could be extended to other zones.

He had strong reasons for believing that such a scheme for community growing of cotton may well prove to be a solution to the mixing problem with the minimum of interference with legitimate trading and with substantial advantage to the cotton growers. Strong objections could be raised against the practicability as well as the economic aspects of the scheme, but he maintained that what had been tried, succeeded and established under somewhat similar conditions in other countries deserved investigation in the Punjab.

The trade was fortunate in having at hand in Mr. Trought's selections the nucleus of a seed supply. If Mr. Trought could succeed in putting on the market in the near future a heavy yielding cotton of not less than 1″ staple, then the scheme now proposed would automatically provide him with facilities both for thoroughly testing the merits of his selections as well as for maintaining their purity both in the field and the factory. He felt that the value of Mr. Trought's work would largely be vitiated unless some such provision is made to minimise, if not totally to restrict, the mixing of his desirable types with inferior types irrespective as to whether the inferior types are other American varieties or *desi*.

It was of vital importance that before any variety was selected for general distribution to zamindars, its merits under varying conditions of soil and water supply should be thoroughly tested.

In the past the only American varieties available for cultivation in the Punjab Colony areas by the ordinary zamindars have been 4-F and 285-F, and latterly a relatively small quantity of 289-F. 285-F has now been almost completely discarded in these areas, but 4-F, or at least 4-F with admixtures of *desi* not exceeding 15 per cent., is reported to be

grown to the extent of almost a million acres. In a "non-disease" year 4-F might yield bountifully in the canal colonies. At the British Cotton Growing Association Farm, Khanewal, over a 3-year period of "non-disease" years 4-F averaged 1124 lbs. of *kapas* per acre, whereas over a 3-year period of "disease" years, the average yield was only 259 lbs. per acre. During the past five years the average yields had diminished steadily, so much so that in 1928 the average yield of 4-F *kapas* was only 108 lbs. per acre. The British Cotton Growing Association had now discontinued the cultivation of this variety at its Khanewal Farm. The only Punjab-American now grown at this farm on a commercial scale is 289-F, which has a staple length of 1-1/16" to 1-1/8". The yield of this variety had fallen from an average of 1225 lbs. per acre over a 3-year period of "non-disease" years to 560 lbs. per acre over a 3-year period of "disease" years. 289-F had consistently given a higher average yield than 4F for the past six years at the British Cotton Growing Association Farm at Khanewal. It was an eminently desirable "bread and butter" cotton in "non-disease" years, and it could be grown at a small profit even in a "disease" year. It commanded a premium of Rs. 80 to Rs. 130 over Broach.

Mr. Thomas invited the attention of the Committee to the provisional conclusions reached at the first meeting of the Conference between the Punjab and Sindh members of the Committee and the Local Sub-Committee which met in July 1928, and to resolution No. 16 of the Indian Central Cotton Committee at its 17th meeting in July 1928 wherein the report of the Conference was adopted. One of the conclusions arrived at was that "*On account of the peculiarities of the soil and the water-supply, the cotton grower in the Punjab must be allowed to grow different varieties of cotton.*" He said that if the finding of the July 1928 Conference was based on a general expression of opinion without the support of reliable and exhaustive data, then the finding of the Conference would appear to need further consideration, and not improbably, a revision. If, however, the views of the Conference were upheld, the door was closed to a further consideration of "community" growing of selected varieties of cotton in the Punjab. He maintained that this important and far-reaching conclusion called for further investigation. From a limited though intensive study of conditions in the Lower Bari Doab Colony and part of the Sutlej Valley Project during the past 18 months, he was of the opinion that conditions of soil and water supply in these tracts are no more diverse over extensive areas than they are in those tracts in other countries where community growing of cotton has been established.

He said he hoped he had made it clear that his only object in elaborating this issue was to pave the way, if possible, for a re-consideration of the all-important conclusion of the Conference already referred to; for, if the Committee endorsed without qualification the findings of the Conference referred to, then it would be waste of time to elaborate any scheme which pre-supposed the community growing of cotton. But, if in the light of the facts now enumerated the Committee would be prepared to reconsider the findings of the Conference, then the scheme outlined

above might well deserve further investigation. The fact that a judicious distribution of 4-F and *desi* cottons on any area will give a greater profit than either of these varieties grown to the exclusion of the other did not necessarily preclude the possibility of a third variety proving more profitable than either. If this premise was accepted then the finding of the Conference was a fallacy.

Admittedly local variations are found in soils, climatic conditions, water supply, and in the incidence of insect pests and diseases, but in community growing of cotton the principle is accepted that the advantages of growing one variety greatly outweigh the disadvantages, subject always to the variety concerned having conclusively proved its superiority over a period of years. The greatest obstacle to the ultimate success of the entire scheme in any limited zone in so far as can be foreseen would probably be found to be the impracticability of legislating against the mixing of varieties in ginning factories. Unless the desired legislation could comprise all ginning factories in the Punjab, then this obstacle might conceivably prove to be insurmountable. Yet the scheme might well stand on its merits even though it might not be deemed politic to legislate against mixing in the factories.

Mr. Milne said Mr. Trought and his staff were at work to discover new and better varieties both American and *desi* and that the present arrangement was that the Cotton Botanist sent his new cottons after exhaustive tests on his own 218 acres of land under expert staff to each of the departmental experimental farms where they were further tested under the strictest supervision. If they were approved they went to the seed farms and grantee farms for multiplication. He was not clear as to the difference between this system of testing and Mr. Thomas' proposals. He would also like to have a more full explanation of "community" cotton growing. If Mr. Thomas would put up a scheme which would help Punjab cotton growers in any way, he would assure him that it would get the most sympathetic consideration.

Rao Saheb V. Krishna Menon said that it must not be forgotten that the Committee were discussing the mixing and not the deterioration of Punjab-American cotton. It was necessary to find out who did this mixing, the producer, trader or consumer, at what stages it took place and in whose interests and who was the ultimate sufferer from the malpractice. If the grower was the sufferer, the remedy could only be found by organising and educating the grower to check the malpractice.

Sardar Ujjal Singh said that the low prices of Punjab-American cotton, due firstly to the deterioration of the crop and secondly to the malpractice of mixing, were causing much concern in the Punjab. These two reasons for low prices should not be confused. Owing to the prevalence of mixing, buyers had stated that they were unable to get first class types of American cotton. Deterioration also had a share in causing this difficulty. He was surprised to hear that Mr. Coleridge could not get 100 bales of his type 2. In Sargodha, he had 500 bales of pure Punjab-American cotton with not more than 3 per cent. *desi* mixture, so it was

hardly correct to say that pure Punjab-American cotton was not available in the Punjab. The consumer might not be able to get pure cotton in Bombay or Karachi but this was probably due to the fact that, on account of faulty inspection, pure cotton did not fetch a proper price in these centres. Pure cotton could be obtained up-country and certain mill owners had been buying it on the spot and having it ginned under their supervision. On the other hand, there were many consumers who deliberately ask factory owners to give them mixed cotton of particular types, *e. g.*, 20 per cent. *desi* mixture up to even 60 per cent. The problem was a most complex one and he doubted if all the difficulties were fully understood. Firstly it was not possible as Mr. Milne had pointed out, to grow one type of cotton only owing to differences in the conditions of soil, water supply, etc. Also during the last few years, there had been lamentable experiences of disease and failure and so the zamindar always grew a certain percentage of his cotton area with *desi*. The problem of seed supply had also to be solved. At present the only source of pure seed was from the Agricultural Department. Much of the Punjab-American cotton seed sown was already mixed. He would recommend that Mr. Milne's testing house scheme should be given a trial and considered that the Committee would be well advised to find the necessary funds for such an experiment. He thought there would be no objection to a trial being made of Mr. Thomas' scheme for community cotton growing. He did not think that the mixing took place in the ginning factories alone but the cotton, to a certain extent, was grown mixed in the fields and mixing was also done by the village *banias*. He considered that buyers should bind themselves voluntarily not to buy mixed cotton and if this were done, it would go a long way towards checking the malpractice.

Rai Bahadur Lala Sewak Ram said that last year he bought American and *desi* cotton separately and stored each kind in separate godowns so that no mixing should take place. However, buyers did not offer for the pure cotton but asked for Punjab-American cotton with 20 per cent. mixture of *desi* and he had to comply with their orders. He had great difficulty in selling pure Punjab-American cotton as there was no great demand for it from buyers and it would not fetch a good price in Bombay. He also found great difficulty in disposing off his pure *desi* as he had still got some two years' stock of *desi* which had not been sold. He was greatly opposed to the licensing of gins and presses as such legislation would prove ruinous to the factories.

Mr. Coleridge moved the following resolution :—

RESOLUTION 19.—"That the Indian Central Cotton Committee recommends that the Malpractices Sub-Committee should devote their immediate attention to the question of the mixing of Punjab-American cotton."

Sardar Ujjal Singh seconded the resolution which was carried unanimously.

SUBJECT 7.—*Cotton Ginning and Pressing Factories Act.*

(b) *Progress* made in Indian States.*

The President said that the Secretary's note was for information. The Committee would be glad to note that the Mysore State Cotton Ginning and Pressing Factories Bill had now reached its final reading and would hope that it would soon become law.

The Secretary's note was recorded.

(c) *Cotton Ginning and Pressing Factories Sub-Committee—Summary† of Proceedings.*

The Vice-President said that there were still a large number of cases of non-observance of the Cotton Ginning and Pressing Factories Act and Rules thereunder being brought to the notice of the Sub-Committee. A lot still remained to be done by Local Governments to ensure that the provisions of the Act were enforced up-country and, if this were done, the hardships at present felt by the cotton trade in Bombay as a result of the slack working of the Act would be greatly alleviated.

The Secretary's note was recorded.

(d) *Watering of Hubli and Gadag Cottons—Bombay Presidency.*

The Vice-President said that members would note that the practice of watering cotton in the Hubli and Gadag markets started in 1927 and had been increasing up to the present time. He considered the reason for this to be that, after the Cotton Transport Act was put into force in this area, no inferior cotton or cotton waste could be brought in for mixing purposes and therefore recourse was had to another malpractice, *viz.*, watering in order to obtain illegal profits. He thought the Government of Bombay should have their attention drawn to this matter and that they should be asked to do what they could to check the growth of the malpractice.

The Vice-President moved the following resolution :—

RESOLUTION 20.—"That the Central Cotton Committee desire to draw attention of the Government of Bombay to the increasing malpractice of watering of cotton in the Hubli and Gadag markets and the surrounding areas. The Committee cannot sufficiently condemn this abuse which must inevitably lead to the lowering of the value of the cotton in the tract affected and react most unfavourably on the grower."

Mr. Coleridge seconded the resolution.

Mr. Main asked if the Committee could offer any suggestions as to what action should be taken by the Government of Bombay in this connection.

The Vice-President said that, on a previous occasion, the attention of the Central Provinces Government had been drawn to the prevalence of

* Appendix XV (page 140). † Appendix XVI (page 142).

watering in the Central Provinces and Berar. He understood the Central Provinces Government had asked their district officers to use their influence to check the malpractice with good results.

Mr. Plymen said that sooner or later, legislation would have to be proposed to deal with this abuse. He thought that the Committee should investigate the matter and lay down a definite limit to the amount of water admissible in cotton. At present there was no information as to how much water could be permitted and these figures ought to be available. This question might be considered by the Malpractices Sub-Committee in the first instance.

The Vice-President said that some information on these lines was already available. The difficulty of laying down definite figures arose from the fact that if, say, a limit of 10 per cent. water was fixed as allowable, everyone would start adding water so as to come up to the permissible percentage. If the Central Provinces Government had been able to improve matters, he did not see why the Bombay Government could not also take suitable action towards checking the malpractice.

Mr. Coleridge said that the greatest difficulty in dealing with watering was that there were no coercive measures or any legal remedy which could be used to check it. He did not see how this malpractice could possibly be stopped without legislation. The man who watered might gain as much as 15 lbs. per bale and even if, under the Cotton Ginning and Pressing Factories Act he was fined Rs. 25, that was not going to make him discontinue the practice. Present legislation was totally inadequate and he hoped that, if this matter was considered by the Malpractices Sub-Committee, they would give their attention to devising further legislation to check the abuse under consideration.

The resolution (No. 20) was carried unanimously.

SUBJECT 17.—*Local Sub-Committee—Summary* of Proceedings.*

The Vice-President said that, amongst other matters, a reference had been received from the Collector of Bombay asking the opinion of the Sub-Committee whether the Rules framed by the Government of Bombay for the certification of weights and scales in cotton ginning and pressing factories should be made applicable to Sind. The Government of Bombay contended that this was not necessary as most of the cotton sales were made in the villages and so the Rules would afford no protection to the cultivators. In addition, it was maintained that the staff of factory inspectors in Sind was insufficient to deal with the additional necessary work involved under the Rules. The Sub-Committee had forwarded the reference to the Karachi Joint Cotton Committee and the Divisional Cotton Committee, Sind, for the opinions of these bodies and their replies were awaited. Another subject, which had been brought to the notice of the Sub-Committee by Mr. Coleridge was the alleged deterioration of Sind *desi* cotton in the last few years.

Mr. Coleridge said that the Karachi Chamber of Commerce was much worried over the recent deterioration of Sind *desi* cotton. Two years

* Appendix XVII (page 14½).

ago, this cotton used to keep its colour throughout the season, *i.e.*, from November to July or August. Now, however, cotton of a good colour bought in January had deteriorated considerably in colour by May. He was assured that this was not due to watering—as might be imagined—and that, although Punjab cottons might be watered, this malpractice was unknown in Sind.

Mr. Thadani said that this matter had been fully discussed at the last Divisional Cotton Committee meeting in Sind. The complaints of the Karachi Chamber of Commerce and the Karachi Joint Cotton Committee were that, although there was no staple deterioration, the cotton lacked strength and was not so bulky as a few years ago and also that the colour went off. He attributed this entirely to seasonal variation and to the reason that in some seasons stained *kapas* was not properly picked over as it did not pay to do so. The deterioration was not intrinsic but was due to the presence of stained cotton which had not been removed. With regard to the complaint regarding colour, some people believed it was due to the humid conditions of Karachi and that cotton held up-country in Sind retained its good colour. This might be true as stocks in Karachi had recently been higher than up-country and thus the complaint would be aggravated this year. There were no complaints of deterioration of staple.

Sardar Ujjal Singh agreed that the deterioration in colour might easily be due to the humid conditions in Karachi. He was surprised to hear Mr. Coleridge state that watering took place in the Punjab. This charge was quite unfounded as watering of cotton was unknown in that Province.

The Secretary's note was recorded.

SUBJECT 6.—*Cotton Transport Act.*—

II.—*Madras.**

The Vice-President said that there was nothing new to report on this subject. The Director of Agriculture, Madras, might be able to give the Committee some information regarding the effect of the amalgamation of the two Southern areas on the introduction of improved varieties of cotton.

Mr. Anstead said that the alteration in the Act had taken place too recently to enable him to judge what effect it was going to have. As the Committee knew, the alteration had been made against the advice of the Agricultural Department and the Indian Central Cotton Committee and he hoped that, as a result of one or two years' working, the error of the step would be apparent and the matter would receive reconsideration. In the meantime all that could be done was to keep the defects of the Act before the notice of Government.

Mr. Hilson said that, in the present year, the alteration in the working of the Act had not mattered greatly as the difference in price between Cambodia and other cottons used to mix with it was so small that it

* Appendix XVIII (page 143).

was not worth while to do any mixing. As regards the future, he proposed to try and work the Act as it stood at present and to tighten up the watch on the border of the protected area in order to prevent cotton from outside entering. Within the protected area, he proposed, by organising the cultivators, to side-step the people who were indulging in malpractices and to place the cultivators in more direct contact with the main buying agencies.

The Secretary's note was recorded.

III.—*Central Provinces.**

The Vice-President said that the Government of the Central Provinces had requested the opinion of the Committee on a note regarding the application of the Cotton Transport Act to certain areas in the Central Provinces and Berar and on the draft notification and schedule referred to therein.

Mr. Plymen said that the Government of the Central Provinces had realised that it would be extremely difficult to introduce restrictions on both rail and road transport simultaneously. The notification before the Committee dealt only with rail transport and it was fully realized that this limitation reduced the scope and effectiveness of the Act. The road approaches to the proposed protected area were not protected by ranges of hills or unfordable rivers and a considerable number of carts could come in direct across country. After the present notification was enforced, he proposed to have these boundaries carefully watched in order to check the extent of imports by carts as it would not be possible to rely on information received from cartmen in the actual markets. He was glad to know the Committee supported the notification which was not yet finally settled as it had to be discussed by both the Provincial Cotton Committee and the Provincial Board of Agriculture before being submitted to the Legislative Council in August. The working of the Act in the next cotton season would require careful watching and would necessitate much local inquiry.

The Vice-President said that he hoped the Central Provinces Government would later consider the question of restricting road transport also.

Mr. Plymen said that the introduction of restrictions on road transport would largely depend upon the cost of the protective agencies required.

The Vice-President moved the following resolution :—

RESOLUTION 21.—"That the Central Cotton Committee cordially approves the proposals submitted by the Central Provinces and Berar Government for the application of the Cotton Transport Act to a combined Central Provinces and Berar area consisting of the civil districts of Buldana, Akola, Amraoti, Yeotmal, Chanda, Wardha, Nagpur, Chindwara, Seoni and Bhandara. The Committee however trust that the prevention of the importation of inferior cotton from

* Appendix XIX (page 143).

Khandesh and Central India by rail only—as is the object of the notification—will only be a preliminary to complete regulation of road transport also in order to afford full protection to the cotton growers in the protected area."

Mr. Palairet seconded the resolution which was carried unanimously.

IV. *Hyderabad.*

The Vice-President said that the Hyderabad State Cotton Transport Bill had now been passed into law and that a copy of the Act and Rules* thereunder were placed before members.

The Secretary's note was recorded.

V. *Indore.*

Mr. Palairet said that the Cotton Transport Bill had been placed before the Legislative Committee early this month but no decision had been arrived at. The Bill had been referred back to a Select Committee and he was extremely doubtful if it would pass in its present form.

The Secretary's note was recorded.

VI. *Gwalior.*†

The Vice-President said that the Gwalior Darbar had so far taken no action in introducing legislation on the lines of the Cotton Transport Act but were awaiting the action of Indore State in order to see how far local trade in that State would be profited by such legislation. He thought it would be inadvisable to urge hasty action in regard to the introduction of such legislation in areas where, so far, no new or improved variety of cotton was ready for extension and no scheme for seed distribution had been prepared.

Mr. Pandya said that the question of a Cotton Transport Act for Gwalior State had been considered by the Gwalior Cotton Committee. The Gwalior Cotton Committee did not think that there was sufficient justification in proceeding with such legislation merely because the matter had been referred to by the Indian Central Cotton Committee. They had tried to find out how much cotton was imported into the State from Mewar and Rajputana and used, as alleged, for mixing purposes. The total quantity last year was found to be about 100-125 bales and there did not seem to be adequate cause for a Cotton Transport Act to exclude such small amounts of cotton. They were watching their neighbour State, Indore, and would see if the local trade in that State was profited by such legislation and, if they were satisfied that this was the case, they would take steps to introduce similar legislation into Gwalior.

The Secretary's note was recorded.

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* Appendix XX (page 148). †Appendix XXI (page 15[illegible]).

VII. *Chhota Udepur.*

The Secretary's note* was recorded.

SUBJECT 20.—*Reports of Provincial Cotton Committees.*—

(*a*) *Punjab Provincial Cotton Committee—Proceedings of meetings on 3rd December 1928 and 26th March 1929.*

(*b*) *Sind Divisional Cotton Committee—Minutes of 5th, 6th and 7th meetings.*

(*c*) *Madras Provincial Cotton Committee—Minutes of 8th meeting.*

(*d*) *Central Provinces Cotton Committee—Proceedings of meeting held on 10th July 1929.*

The Proceedings and Minutes† of the above-noted meetings were recorded.

Mr. Main said that the Sind Divisional Cotton Committee had been considering the rules drafted under the Bombay Cotton Markets Act although these were not of immediate interest to Sind as the Act would not be applied to that Province in the near future.

Mr. Anstead said that, with regard to a Cotton Markets Act, the new Provincial Advisory Committee had forwarded the proposals of the Provincial Cotton Committee in this connection to the Government of Madras for consideration.

Mr. Plymen said that the Central Provinces Provincial Cotton Committee had still to consider the proposed Cotton Transport Act and the Cotton and Grain Market Rules as amended. They were also devoting attention to the malpractice of watering which he thought was not now on the increase. He would always be glad to get information on this matter upon which he could take action. Further, it had been agreed that the report on the Central Cotton Committee's inquiry into cotton finance and marketing in Berar should be translated into Marathi and he would ask the Committee, as agreed upon, to publish the vernacular edition.

SUBJECT 8.—*Cotton Marketing.*—

(*a*) *The Hyderabad Agricultural Markets Bill.*‡

The Vice-President said that the Hyderabad Durbar had now introduced an Agricultural Markets Bill on the lines of the Bombay Cotton Markets Act. He was sure that the Committee would approve of such a development and that this legislation would greatly benefit the cotton growers in Hyderabad State.

The Vice-President moved the following resolution :—

RESOLUTION 22.—"That the Central Cotton Committee cordially approve of the decision taken by His Exalted Highness the Nizam's Government to introduce an Agricultural Markets Bill on the lines of

* Appendix XXII (page 152).
† Not printed.
‡ Appendix XXIII (page 154).

the Berar Cotton and Grain Markets Law (1897) and the Bombay Cotton Markets Act (1927). The Committee consider that such action constitutes a very commendable step in the direction of removing the disabilities under which the cultivator at present labours in disposing of his produce and trust that it will result in the multiplication of organised cotton markets throughout the State."

Mr. Coleridge seconded the resolution, which was carried unanimously.

(*b*) *Amendment of Rules under the Berar Cotton and Grain Markets Law.*

The Vice-President said that the draft amended rules under the Berar Cotton and Grain Markets Law had not yet been finally decided upon but a most prominent feature of the amended rules would be that the seller is fully safeguarded at all stages. The rules, when fully approved, would be of great value as a model for similar legislation in other Provinces.

Mr. Kolhe said that the draft amended rules were being discussed by the Provincial Cotton Committee and the Provincial Board of Agriculture during the current month. They would then be forwarded to the Local Government for consideration. Certain of the rules had been objected to and would require amendment. He considered that a similar Cotton Markets Act should be introduced for the Central Provinces on the same lines as for Berar and therefore he had introduced the Central Provinces Cotton Markets Bill which has been circulated for opinion. This Bill was on the lines of the Berar legislation and, under it, an effort has been made to protect all interests.

(*c*) *Rules under the Bombay Cotton Markets Act.*

The Vice-President said that the draft rules were at present under consideration by the Government of Bombay and the Secretary's note* was merely a statement of the present position with regard to them.

Mr. Main said that the drafting of these rules had proved a troublesome business. A first draft had been submitted to the Central Cotton Committee and then referred to a Sub-Committee for special consideration and suggestions. The draft after being amended by this Sub-Committee had been sent to the Remembrancer of Legal Affairs, Government of Bombay, who had taken a very considerable interest in them as this was, more or less, a new form of legislation. He had made numerous suggestions which were, at present, under consideration by Government.

The Secretary's note was recorded.

(*d*) *Indore.*†

The Vice-President said that he hoped, as a result of the experience already obtained from the working of cotton markets in the Holkar State, the Durbar would soon consider the introduction of a Cotton Markets Bill.

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* Not printed.

† Appendix XXIV (page 156).

Mr. Palairet said that the rules for the present cotton markets organised in the State were, as far as possible, based upon the Berar rules. The working of these markets was being fully investigated and so far he saw no justification for altering the rules which appeared to be working well. This year, it was proposed to start another cotton market at Indore itself which would be opened before the end of the year.

SUBJECT 14.—*Finance of the Cotton Crop Up-Country.*

The President said that the Secretary's note* on this subject was for information. The latest reports, *i.e.*, Sind, Gujerat, Madras and the General Reports were largely worked up by Mr. Khambatta, Temporary Economist, appointed by the Committee and these had now been printed and distributed. Local Governments had been asked what action, if any, they proposed to take on these reports and on the recommendations of the Special Sub-Committee which considered them. In addition, Local Governments had been requested to signify their willingness to have the reports, dealing with their territory, translated into the vernacular concerned.

Mr. Milne said the Punjab Report had not yet been published, as Mr. Roberts had objected to certain statements which appeared therein. The Report had accordingly been referred to a Sub-Committee of the Board of Economic Inquiry, Punjab, and the points under dispute placed before Mr. Calvert, Financial Commissioner, Development, for decision. The report should be available in about ten days' time.

The Secretary's note was recorded.

SUBJECT 13.—*Fumigation of American Cotton—Secretary's note*†

The President said that the refund of eight annas per bale, recommended by the Committee at its 17th meeting and sanctioned by the Government of India, had now been disbursed to importers. Imports continued to be very slight and no further rebate could be considered at present.

Mr. Coleridge said that, in connection with the imports of American cotton, an important point had now arisen which could not have been foreseen previously. As imports were small at present, no ships had been chartered from America to Bombay but the cotton was brought from America on the Texas Mediterranean line and was transhipped at some Mediterranean port for Bombay. As importers must give the Customs due notice of the ship by which imports of American cotton were arriving in Bombay or else suffer the penalty of heavy fines, importers were now placed under a definite hardship as they were often unaware of the name of the ship to which their cotton was transhipped on the Continent and were accordingly unable to give the required notice to the authorities in Bombay. He thought that this difficulty should be taken up with the Bombay authorities in the interests of the importers.

The Secretary said that he would be pleased to do as Mr. Coleridge had suggested.

The Secretary's note was recorded.

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* Appendix XXV (page 156). † Appendix XXVI (page 157).

SUBJECT 16.—*Egyptian scheme of loans * on security of cotton to assist the small producer.*

The Vice-President said that this most interesting subject had been brought to the notice of the Local Sub-Committee who thought it of such great importance that they decided to place it before the full Committee at this meeting in the hope that a very useful discussion would result. The scheme was intended to give relief to the small grower by means of loans against the security of his cotton. The scheme was to be worked by Government in co-operation with banks, Government lending a certain amount to each bank in order to enable it to make advances to cultivators when cotton was deposited. Advances could be obtained against a minimum quantity of six maunds and a maximum quantity of 600 maunds of *kapas*, Government charging only 4 per cent. by way of interest and bearing all storage and supervision charges. These loans were to be advanced for a period of four months but if necessary this period might be extended by a further equal period. The borrowers had to agree when they deposit their *kapas* that Government might gin all their cotton and Government reserved to themselves the right of selling the seed at a reasonable price. In default of repayment of advances Government could proceed to sell the ginned cotton after giving 30 days' notice to the borrower. The Vice-President said that it was not quite clear whether such loans were to be advanced to all who applied for them or only to members of co-operative societies but this point had been referred to the Egyptian Government and no doubt would be made quite clear very shortly. It was quite clear however that the Egyptian Government's intention was to assist as many growers as possible by means of this scheme.

Sir Purshotamdas Thakurdas said that he had very little to add at this stage, in view of the comprehensive summary which the Vice-President had given to the meeting. This subject was first brought to his notice by an article which appeared in the Pioneer and he sent the cutting thereof to the Secretary with a request that he should collect as much information on the scheme as was available. Since then the Banking Committee had been appointed and this subject appeared to be one which should be gone into by the Provincial Committees, formed under the Banking Inquiry. He intended to ask, at the close of this discussion, whether he may have the permission of the Committee to use the papers dealing with this subject which were before members. He would like to ask the Secretary of the Banking Enquiry Committee to send a copy of these papers to each of the Provincial Committees and to ask them to frame a few questions based on this information in order to find out from important centres like the Punjab, United Provinces and Gujerat whether the cotton growers in those tracts thought that anything could be done on similar lines which would be of use to them. The scheme, as received from Egypt, was fairly complete regarding important details. He was convinced, after the experience of a quarter of a century that a similar scheme may assist the cotton grower in India. In America, it was generally

* Appendix XXVII (page 158).

observed that after the crop was ready, the market usually rose. In India the reverse generally took place and when the crop was ready to be marketed, the market was generally slack. In America it is said that the holding power of the cultivator is much better than the holding power of the cultivator in India. In India, the *Sowkar* often held a lien on the cultivator's crop and, with the comparatively few facilities which the cultivator enjoyed in the way of holding his cotton, it was not surprising that prices decline when the crop is marketed. Whether a scheme like this would be availed of by the small grower was a question upon which he did not think anybody would like to express an opinion without definite information from the districts as to what extent the growers of between 50 and 500 maunds of *kapas* were really free from a lien on their crops. He hoped that useful information would be forthcoming from Provincial Committees when this scheme was examined. Personally he considered it was an excellent scheme but the question was how Government could devise ways and means to put it into practice. The Egyptian Government had very wisely fixed the maximum period for which the loan can last. Advances would be sanctioned for a period of four months and could be extended for another four months more. The American crop and the American prices rule the cotton prices of the world. Egyptian was a distinct variety by itself which could not be replaced except by some qualities, *viz.*, of American and African. Indian cottons, barring the very shortest staple, could easily be replaced at a difference and if the cultivator here should hold out too long or unreasonably, he might find that he had missed the market. These details however were such upon which trade interests would be competent to advise Government. He understood that the Egyptian Government had not yet put this scheme into practice but it would appear that they mean to do so in the near future. The Central Cotton Committee would watch the progress of this scheme with interest when it was put into effect but he did not think it was necessary to defer any action till that took place. He was sure the Committee would agree with him when he asked that the Banking Enquiry Committee should be allowed to use this memorandum. He also suggested that copies of it should be sent to the press. Within the next two years he trusted that some definite report on the feasibility and on the utility of the scheme would be available.

The Vice-President moved the following resolution :—

RESOLUTION 23.—"That the Central Cotton Committee consider that the details of the Egyptian Government's scheme for the granting of loans on security of cotton in order to assist the small producer are of great interest and importance to India. The Committee feel that the information collected by the Committee with regard to this scheme should be brought to the notice of the Government of India and Local Governments with a request that the details of the scheme be communicated to Co-operative Institutes, Central Co-operative Banks and similar institutions in each province interested in the finance and marketing of the cotton crop."

Sir Purshotamdas Thakurdas seconded the resolution.

Mr. Plymen said that, in view of the labour and expenditure which the Committee had taken in collecting information regarding cotton finance and marketing up-country, he strongly supported the resolution. He would however request that copies of the papers on this subject be also sent to Directors of Agriculture in the different Provinces. There was only one point he would like to raise in connection with the scheme. He understood that the money was to be advanced on the crop but, was it not a fact that the cultivator wants money for his cultivation expenses and it was at that time he got into the hands of the *Sowkar*. This matter would have to receive consideration and efforts made to see whether some means could not be devised whereby the money came to the cultivator earlier.

Rao Bahadur Deshpande said that he strongly supported the resolution. He said he was Chairman of the Central Bank in Nagpur which had started some *adat* shops with the object of giving facilities to cotton growers. He thought the Egyptian scheme would be most beneficial.

Mr. Kolhe said that he also strongly supported the resolution. He thought it was a scheme which would be very beneficial to the cultivator. If however the cultivator could get the advance a little bit earlier he would be saved from the clutches of the *Sowkar*. When the cultivator wanted money for cultivation he took advances from the money-lender who then obtained a mortgage on the future crop in return for a small advance. Thus the whole or greater part of the crop was practically handed over to the money-lender.

Rao Saheb Krishna Menon said he thought this subject was a very important one and should be examined in all its bearings. There were various other subsidiary points which would have to be considered and he thought it would be advisable if the Committee sent some one to Egypt to investigate the subject in all its bearings. The most important point connected with the working of the scheme was the land tenure system under which the tenant worked.

Mr. Sane said that he noticed that the money was to be advanced on the crop after harvesting and not while the crop was on the field. He was not at all sure if this was feasible under Indian conditions. He did not know if cultivators who had partly mortgaged their crop to the *Sowkar* would be able to make use of such advances. Finance was an absolute necessity if such a scheme was to be a success. In Baroda the Banks charged from 7 to 8 per cent. on advances. While the direct advantages of this scheme of financing the farmers would be large, he thought it would have very considerable indirect advantages in the progress of the cotton cultivation all over the country.

Mr. Hilson said he had great pleasure in supporting this resolution. In Madras Presidency they had a scheme with regard to seed unions which he would like to describe briefly. In a village ten or twelve cultivators were persuaded to join together and to agree to grow an improved type of cotton recommended by the Agricultural Department. The

Department arranged to have this cotton ginned and the lint sold collectively. The seed was taken over at a fair price by the Department. The procedure adopted was to give these cultivators an advance of so much per acre for cultivation purposes. This advance was given in instalments as required during the cultivation season. This money could be used by the cultivators to pay their share when they became members of the seed union and on the strength of that share they were able to borrow from the co-operative bank from three to five times the amount of their share capital. With that money they could get through their cultivation season and manage their crops in a reasonable manner. The amount of money lent was not supplied until after the crop was sown and depended upon the actual acreage of cotton. Tenders were obtained from different ginners for ginning all the cotton and the seed was taken over by the Department at market rate *plus* a small premium. The lint was sold by the Department for the cultivators either by auctions or by sending samples to different firms who were interested in this cotton and obtaining offers from them.

Mr. Milne said he supported the motion. The scheme was complicated and there would be many difficulties to be solved, but he agreed that the correct thing was to send it to local Cotton Committees and to get their opinion as to how this scheme would work. He was personally a little afraid of the difficulty of grading the cotton which might prove troublesome. In Egypt the idea appeared to be to keep every man's consignment separate. In that case, the question of grading would not come in at all, but it would mean a greater area of godowns and more staff to do the clerical work and keep records. He was disappointed to hear that the scheme was not yet in actual operation in Egypt because he felt knowledge of its actual working would have been very useful. He hoped that in course of time more detailed information would be got on the difficulties met with in Egypt and the amount of success obtained in the actual working of the scheme.

Sirdar Ujjal Singh said he fully agreed with the previous speaker that this question was complicated and full of difficulties. It was known that the cultivator, especially, in the Punjab, was heavily involved in debt. For the last few years they had been trying to find out the reasons for the failure of co-operative shops established in different markets in the Punjab. The chief reason for the failure of these shops was the fact that the cultivator was so heavily involved in debt that he could not bring his cotton to the co-operative shop. Now the problem before the Punjab Government was the establishment of mortage banks to relieve the cultivator of his debts in the first place. He however agreed that a scheme on the lines of the Egyptian Scheme would help cultivators who were not heavily indebted.

Mr. Thadani said that the Egyptian scheme depended largely on Government agency and help. In the United States of America, other agencies were employed and the farmers bound themselves voluntarily to market their cotton through their Associations. The cotton was

classified and sold according to grade. An advance of, at least, one half the value of the cotton was made when the cotton was delivered at the Association's godown and, after sale, the balance was adjusted. If an Association on similar lines could be formed in India it would be of great benefit to the cultivators.

Sir Purshotamdas Thakurdas said he had little to add to the debate which had been very interesting. He would confine his remarks to one aspect of the subject raised by members from the Central Provinces, namely, the financing of the cultivator for cultivation purposes. This scheme did not pretend to deal with all aspects of cultivators' finance and its benefit was confined to the stage when the cotton was actually ready. He thought that the financial requirements of the cultivator before and after harvest should not be mixed up but should remain separate otherwise confusion might result. Regarding what Mr. Milne had said, he thought that the papers on the scheme which were before members gave the inference that the scheme had not yet started but was at present under consideration by the Egyptian Government. In this connection the Honourable Sir George Schuster, who had intimate knowledge of Egyptian conditions and took a great deal of interest in them, had informed him that the scheme had only been circulated and had not yet been put into practice. Mr. Hilson had given a very interesting account of a special scheme which has been tried in Madras and he hoped Mr. Hilson would send a note on the working of this scheme to the Committee for its records.

Mr. Hilson said that he had already promised to do that.

Sir Purshotamdas Thakurdas said that the complaint was often made that whenever such a good scheme was put into practice in an area the buyers in that area combined to take away the benefit which should have gone to the cultivator. He could not understand why buyers should be looked upon as being superhuman. There were very good export houses in Madras and those who are in charge of such schemes could surely take steps to see that similar risk is not incurred next year and that the tactics of the buyers were suitably countered. One aspect of this scheme would require most careful consideration, namely, it would be most necessary not to mislead the cultivator and a price for basing advances upon must be fixed which would be fairly low. Suppose this scheme was tried in the Broach district, and the current price of Fully Good Broach was, say, Rs. 400 would it be correct for the Government to make advances on the basis of Rs. 300 ? That would give the cultivator the idea that the market could not go under Rs. 300. If there should happen to be any violent fluctuations in American prices in the market and the price of Broach went down below Rs. 300 Government would be saddled with a bad debt. Therefore it would be very necessary to fix a level of price for each variety which was absolutely fool proof for the season and under which the price could not drop without attracting investment purchases. In conclusion he assumed that the Committee had agreed to his suggestion that copies of the papers on this subject should be given out to the press and made available

to the public at large in order that general interest in this scheme might be aroused.

Sir Purshotamdas Thakurdas' suggestion was agreed to.

The resolution (No. 23) was carried unanimously.

SUBJECT 19.—*Technological Research.*

I. Progress Report of Director, Technological Laboratory.*

The Vice-President said that the usual Progress Report of the Director, Technological Laboratory, was submitted to the Committee and it showed that a considerable amount of excellent work had been done.

The Vice-President moved the following resolution :—

RESOLUTION 24.—"That the Progress Report of the Director, Technological Laboratory, be adopted."

Mr. Coleridge seconded the resolution and said that while he appreciated the fact that the Laboratory had done most wonderful work and that the Technological Laboratory bulletins were read all over the world, he felt that the work had hitherto been too much restricted to the purely scientific side. He did not think that the Laboratory had proved of quite as much value to the ordinary spinner as it might have done. The testing of standard cottons which were grown under exceptionally favourable conditions was doubtless of great value to agricultural officers but he considered that the cotton trade would appreciate much more tests made on samples of the ordinary commercial crop which became available in the market each year. The difference between such tests and the tests on Agricultural Department cotton would be considerable and would supply valuable information to spinners.

Sir Purshotamdas Thakurdas said he did not wish to strike a discordant note, but he felt strongly that the mill industry was not interested in the work which was being done at the Technological Laboratory. He would like to know how many mills had approached the Laboratory with requests for work to be done on their behalf. He was afraid the commercial community did not make use of the facilities provided at the Laboratory and knew little or nothing of the work going on there. There were eighty mills in Bombay and sixty in Ahmedabad and, of these, very few indeed took advantage of the Laboratory or had any interest in the work in progress there. In this respect, he felt that the policy of the Laboratory had been wrong and that, in a year or two, they might be asked to justify the large amount of money which had been spent on this institution when they may find it difficult to give a satisfactory answer to the trade.

Mr. Milne said he thought the position was misunderstood. He had started work on cotton twenty years ago and, at that time, he had experienced the greatest difficulty in getting the spinning qualities of the fibres of his new cottons tested. Finally, through the courtesy of Messrs. Tata & Sons, he had been able to arrange for that firm to conduct the necessary tests required by him and, if they had not done so, he

* Appendix XXVIII (page 165).

doubted whether there would have been the improved cottons to-day which had been introduced throughout the Punjab. These tests on fibre lay at the basis of a cotton breeder's work and the Laboratory was started primarily to deal with this particular phase of cotton improvement. There had never been any intention of utilising the Laboratory as a testing-house for the ordinary spinner; its function up to date had been to enable cotton breeders and specialists to know where they stood in regard to the evolution of improved varieties. The Technological Laboratory was an absolute necessity to the work of cotton improvement in India. Work in the interests of spinners was a separate matter. He had no objection to this second function now being considered and developed if it was found possible but the work of the Laboratory on the material provided by cotton breeders and Agricultural Departments was of primary importance.

Mr. Hilson said he would like to assure Sir Purshotamdas Thakurdas that if all the other schemes of the Indian Central Cotton Committee were abandoned and the Technological Institute alone permitted to continue, the Committee would still have fully justified its existence. The Laboratory had taken a great load off his back. In the past whenever he desired to get expert opinion on the spinning value of any new strain of cotton evolved by him in the course of his work, he had to send samples to a commercial mill for testing. He was most grateful for such help from the mills but, in mill tests, the conditions were naturally bound to vary and the testing of such samples had to fit in to the ordinary routine work of the Mill. Now he could send his samples to the Technological Laboratory where they were tested under identical conditions and he was thus enabled to make comparisons which told him exactly where he stood in his work. This was an advantage which could not be sufficiently emphasised.

The Vice-President said that, although it might be true that spinners had not taken advantage of the Laboratory, he would point out, although he was a spinner himself, that this was not due to any defect in the Laboratory itself. He must attribute it partly, at least, to the apathy of the spinners themselves. Very good work had been done already in the Laboratory and valuable results had been obtained on several practical matters of great interest to spinners. His mills, at any rate, had made frequent demands upon the Laboratory. Just at present a test was being carried out on a comparison of yarns which could not possibly be done in the mill. The main reason why spinners had not taken advantage of the Laboratory was that a definite policy had never been laid down. It had previously been discussed whether testing at the Laboratory should be confined to farm samples or whether spinners should be allowed to send cotton for testing. At that time, it was felt that if, for instance, mills were allowed to send their mixings for testing, specially good mixtures might be submitted and the results of the tests used as a sort of certificate for the mill in question. In this way, difficulties might arise. The question was also discussed whether fees should be charged for such tests as, if this were not done, mills might discontinue their own tests and send samples to the Laboratory only. The matter

was left there, but he thought more advantage would have been gained if mills had been informed that tests could be carried out in the Laboratory which could not be done in mills and had been asked to submit any difficulties which they found in their own testing to the Laboratory for examination. At present tests had been made of great practical utility to spinners. A test had been made at the Laboratory on the effect of passing the cotton through one and two heads of the drawing frame. In mills the practice was to pass through three heads of drawing but the results of these tests showed that it made little or no difference whether one, two or three heads of drawing were used. A point like that must be of great interest to millowners. The results obtained in the Laboratory were tested in his mills and it was found that the reason why only one or two heads of the drawing-frame served the purpose in the Laboratory was that the cotton there was tested on a single card and so was of uniform quality, whereas in mills, where nine or ten cards are used, this uniformity was not obtainable. Therefore they were justified in passing their cotton through three heads of drawing. Other tests on the effect of humidity on spinning had been carried out at the Laboratory which could not have been done in the mills where conditions cannot be regulated to the same extent. Unfortunately, Sir S. B. Mehta was not present or he would have given an account of these tests which were of great interest to him as he had to contend with a very hot dry climate at Nagpur and the result of the work at the Laboratory was important from his point of view. At present, experiments on different high drafting systems were in progress at the Laboratory. Four systems were being compared and every mill could not try all these systems for itself. What mills did at present was to await the results of the testing of a system by some particular mill but the results obtained at the Laboratory where all systems were being tried under similar conditions would be much more useful. However, he was afraid that the mills might not be aware that such tests were in progress and he felt that it was essential for the Laboratory to establish a closer touch with the mills and to lay down a definite policy. Until this was done, he feared that the trade would not take much advantage of the Technological Laboratory.

Sir Purshotamdas Thakurdas said that, in his opinion, the point of view expressed by him in his previous remarks had been more or less proved in the course of the discussion which had taken place. With the exception of the Vice-President, no trade member had taken part in the debate in order to say that he had benefited by the assistance of the Technological Laboratory. He accepted the assurances given by the Directors of Agriculture and Cotton Breeders who had spoken, that, as far as they are concerned, they have found the Laboratory useful. However, he would like to draw attention to the comparatively high scale on which the Committee was paying for these facilities to Directors of Agriculture. The cost of the Laboratory in 1928-29 was Rs. 1,36,000 and, if only seventy tests were made, as stated in the discussion, it had cost Rs. 2,000 for each test. This was more than any institution could afford even although the Directors of Agriculture said that the work

was of very great use to them. He would urge most earnestly that the scope of the Laboratory be increased and extended or, within a year or two, trade members like himself, would press that this luxury should not be indefinitely continued. It was essential that the question of further uses to which the Laboratory could be put should be examined closely or this experiment could not be kept going. He was not criticising the Laboratory but he felt that in order to increase its utility, the Director must find out the directions in which the cotton trade and the mill industry could be more fully interested in its work and usefulness.

Mr. Anstead said that it was fairly obvious that what was wanted was some sort of publication explaining in simple language exactly what the Laboratory had done for the cotton growers and that this should be issued for the education of the public.

Mr. Milne said that the expenditure on the Laboratory would be more than justified if it could be shown that, as a result on the work done there, the cultivator had received even Re. 1 per acre more profit.

Sir Purshotamdas Thakurdas said that, even if it could be proved that an increased profit of Re. 0-8-0 per acre had accrued to the cultivator through the activities of the Laboratory, he would be prepared to double the expenditure on that institution. He thought that it would be most difficult to prove that any increased profit at all had resulted to the cultivators from the activities of the Laboratory. If Directors of Agriculture could say that, as a result of the facilities provided at the Laboratory, they have been able to bring out some cotton which meant a bigger return to the cultivator, he would be satisfied.

The resolution (No. 24) was carried unanimously.

The Vice-President moved the following resolution :—

RESOLUTION 25.—"That the Central Cotton Committee request the Technological Research Sub-Committee to consider most carefully, at the earliest opportunity, means whereby the Committee's Technological Laboratory could be made of more practical use to the cotton trade, without, in any way, reducing the present value of the Laboratory to the cotton breeders of Provincial Agricultural Departments."

Sir Purshotamdas Thakurdas seconded the resolution which was carried unanimously.

II. Report of Technological Research Sub-Committee.*

The Vice-President said that, owing to the Director, Technological Laboratory, proceeding on leave, it was found necessary to hold the meeting of the Technological Research Sub-Committee before the meeting of the full Committee. He would only like to refer to one item arising out of the report, namely, the neppiness of 289F cotton. This was an excellent cotton with a good staple and a fine silky fibre but owing to

* Appendix XXIX (page 180).

the presence of an abnormal number of neps in the yarn, it was practically useless. He would be glad if any Director of Agriculture could explain what this character of neppiness was due to and whether it could be obviated or, at least, diminished in any way.

The Vice-President moved the following resolution :—

RESOLUTION 26.—"That the Report of the Technological Research Sub-Committee be adopted."

Sir Purshotamdas Thakurdas seconded the resolution.

Mr. Trought said that the general cause of neppiness was the presence of undeveloped fibres in the boll. This might be due to the effect of climatic conditions or might be an inherited character of the cotton. He thought it could be improved by good cultivation.

The resolution was carried unanimously.

SUBJECT 12:—*Cotton Ginning and Pressing Factories Pools*—Replies from local Governments.*

The Vice-President said that the resolution passed by the Committee at its last meeting with regard to this subject had been forwarded to all local Governments and the replies received so far were before members. In addition, an interesting note on the subject had been received from the Factory-owners' Association, Khamgaon, Central Provinces. It appeared that the question of the effect of such pools of cotton ginning and pressing factories on the cultivators required a thorough investigation. The general opinion was that such pools were detrimental to the cultivators' interests and it was difficult to see how the case could be otherwise when factory-owners were receiving shares in a pool although their factories were standing idle. The suggestions received were that the Committee should make a complete investigation of the subject—that where one or more factories in an area were kept closed, no night working should be permitted in any other factory in the same area—that a system of licensing with control of rates by Government should be introduced as a legislative measure. He would suggest that Directors of Agriculture should be requested to report any cases of exorbitant ginning and pressing rates due to pooling to the Committee so that definite data would be available when the subject was discussed in Sub-Committee.

Mr. Richards said that the United Provinces Government felt that there was no evidence that such pools as were established had worked to the detriment of the cultivator. There were about 80 ginneries of which over 70 had worked in the past season so that, judging from the amount of cotton crop, there were plenty of ginneries working to deal with the crop on an ordinary commercial basis. Moreover, the rebate granted by the pools was not limited, and sufficient scope was thus provided for the determination of economic rates. The suggestion had been put forward in the United Provinces also, that, under the Factories Act, it might be possible to deal with ginning pools by preventing night shifts.

* Appendix XXX (page 181).

The Factory Act was designed to protect labour, and it was doubtful whether such matters came within the purview of the Act. He was doubtful whether any legislative action could be effective, except licensing, even if local Governments were willing to interfere, as the pool could form themselves into a company operating a number of ginneries. His Government considered that if the question is to be pursued, much more information is required, the collection of which should be arranged for, and financed by the Indian Central Cotton Committee.

Sir Purshotamdas Thakurdas said that this was a matter upon which one could speak justifiably on either side of the question. There doubtless were cases of greedy factory-owners who have brought discredit on factory-owners as a whole by exorbitant charges for ginning and pressing. On the other hand there are large tracts of cotton growing areas with an inadequate number of factories and where, if any artificial restrictions were put on, it would decidedly be to the detriment of the grower. A very interesting experiment had been carried out in another country somewhat similarly constituted to some of the provinces in India. He referred to British East Africa and Uganda. It had been recognised that, during the last two or three years, the number of ginning factories there was far too large compared with requirements for adequate ginning facilities for the cotton crop. The Government had appointed a Committee which issued its report only two months back and definitely recommended to Government that no more factories should be allowed to be put up. Conditions in some parts of India resemble Uganda but where some sort of control is suggested for all India, he felt that it was necessary to proceed cautiously. He was well aware of cases where ginning and pressing pools had been made. The ordinary rate for pressing is in the neighbourhood of Rs. 3 to Rs. 4 per bale and then there is no complaint. It cost the press about Rs. 2-8-0 to Rs. 3 to press the cotton. He also knew of cases, and they were in Indian States principally, where the pressing charges were as high as Rs. 10, Rs. 11 and Rs. 12. He had even known of cases where the rate was Rs. 15 per bale. He felt that all-India legislation in this connection may be dangerous. If Provincial Governments took a little interest in such cases of exorbitant rates, and directed their officers to send for the factory-owners concerned and speak to them frankly it would have a great effect. He therefore thought that what was required was a little stricter provincial control before legislation and more persuasion of the right sort. With regard to the stoppage of night shift working, he was a gin and press owner himself and if he had a favourable season and his compounds were full of *kapas*, why should he be prevented from getting labour to enable him to work night and day if he could do so? He was convinced that any such artificial interference was a thing to be avoided. He felt that what was wanted was a little more propaganda work and a little more interest created by various Provincial Committees and by the Directors of Agriculture in bringing to the knowledge of their Governments extreme cases where greedy factory-owners had formed pools at rates which were double the normal cost of ginning and pressing. He considered that this was one of those subjects which should be taken up

by the Malpractices Sub-Committee proposed by Mr. Coleridge. He thought the Committee should go slow in this matter. The best thing would be to refer the matter to that Special Sub-Committee, and to request them to submit to this Committee a report indicating on what lines they think this problem should be tackled.

Sardar Ujjal Singh said that the pool system in the Punjab was not carried out on any extensive scale and was of very recent origin. Before 1924 there were altogether 252 factories in the Punjab and at present the number was 371. Since 1924 there had not been a single good cotton crop year and that was the main cause of the pooling system being adopted in some places. It had been said that the pool system necessarily resulted in a loss to the cultivator. He did not entirely agree with that view. In the Punjab, this year and last year, not more than one-third to one half the number of gins had been working. This certainly contributed very largely to high overhead charges. If factory-owners found that the crop was not enough they combined so that overhead charges were cut down. In two or three places where this pooling system had been working this year, the rate of ginning and pressing charges had not exceeded Rs. 12 a bale including ginning and pressing and he considered that members of this Committee would agree that this was not a very high charge. So it could not be said that in the Punjab at any rate the pooling system had been intended entirely for robbing the cultivator. As a matter of fact, it had been devised in order to stop cut-throat competition among factory-owners. One remedy was to disallow night shifts. Another remedy was to stop the erection of factories in places where there was not enough room for them or to give facilities to factory owners in over-stocked places who desire to remove their factories some-where else. For such men Government ought to provide land at concession rates.

Mr. Kolhe said that nobody could deny that these pools were detrimental to the interest of the cultivators but there were differences as regards the remedies which could be adopted. Of course, this was a question on which much could be said on both sides. He had circulated the rates supplied to him by the Director of Industries of ginning and pressing among the members of this Committee. The rates for 1927-28, the year for which rates were given, were Rs. 16-12-0 average maximum for ginning and for pressing the rate was Rs. 7 or Rs. 8, this being the maximum rate. Those were the figures supplied to him by the Director of Industries. Sir Purshotamdas Thakurdas had suggested that the rates could be lowered if Government would endeavour to approach the factory owners and to persuade them to be reasonable. He did not think Government could do this as, if such things could be done by persuasion, legislation would never be necessary. The Committee must come to some conclusion whereby the interests of the cultivator, as well as the factory owner, would be protected.

Mr. Milne said he agreed with Sardar Ujjal Singh in what he said about the increase in the number of pools in the Punjab. There were a number of years of plenty and about 1922-24 or thereabouts a large

number of factories sprang up. Now lean years had come along and owners of presses and ginneries have made pools in order to save themselves from the difficulties they were confronted with. It was hoped that the Board of Economic Enquiry in Punjab would make an investigation into the costs of ginning and pressing cotton in the Punjab and the results of this inquiry would be a considerable help in gauging to what extent the cultivator was being robbed by such pools.

Sir Purshotamdas Thakurdas said that as conditions were not identical throughout India, it would be most difficult to have all-India legislation in this connection.

Sir Purshotamdas Thakurdas moved the following resolution :—

RESOLUTION 27.—"That the Central Cotton Committee consider that the papers on the subject of Cotton Ginning and Pressing Factories Pools, submitted to this meeting, should be referred to the Malpractices Sub-Committee for the preparation of a report indicating what steps are necessary and feasible to stop abuses of Cotton Ginning and Pressing Factory pools, if any."

Mr. Plymen seconded the resolution and said that, in the Central Provinces they had decided to get the views of the agriculturists themselves on this matter and he had issued the necessary instructions to his staff to make inquiries. It would be difficult to stop night shift working without considerably increasing over-head charges.

Sir Purshotamdas Thakurdas said he would like to suggest to the Malpractices Sub-Committee that, when they discussed this question, they should co- opt at least four members representing the cultivators' interests to assist in the examination of the matter.

The resolution was carried unanimously.

The Vice-President said that, on behalf of the Committee, he would like to express their grateful thanks to Dr. McRae for the efficient and tactful way in which he had presided over their meetings during the past three days.

Sir Purshotamdas Thakurdas said that he associated himself fully with the sentiments of the Vice-President. Dr. McRae had conducted the proceedings in an expert manner although he had stated at the start that it was the first occasion upon which he had occupied the Chair at such a meeting.

The President said that he wished to thank the Committee very sincerely for their kindness. The success of the meeting was entirely due to the members themselves to whom he was most grateful both for their courtesy to him while in the Chair and for their friendliness towards him outside the meetings.

W. J. JENKINS.

RESOLUTIONS.

Appreciation of the work of Dr. D. Clouston. Page

1. "The Central Cotton Committee desire to place on record their appreciation of the work of Dr. Clouston who was a member of the Committee for seven years and its President from 1924-28. Dr. Clouston's tact and co-operation have contributed largely to the success of the Committee's meetings" 11

Nomination of a representative of the Indian Central Cotton Committee on the Advisory Board of the Council of Agricultural Research.

2. "That the Central Cotton Committee nominate Mr. S. D. Saklatvala as their representative on the Advisory Board of the Council of Agricultural Research" 11

Cotton Transport Act—Surat areas.

3. "That the Central Cotton Committee approves of the decision of the Local Sub-Committee to adhere to the original resolution passed by the Committee recommending that restrictions on road transport between the Olpad-Ankleshwar and Surat zones should be re-introduced and enforced until the growing of inferior cotton in the Olpad-Ankleshwar zone has been discontinued, and urges the Government of Bombay to place the matter before the Legislative Council at the earliest opportunity. The Central Cotton Committee further considers that the issue of any conditional licenses for the transport of half-pressed bales of ginned cotton from the Olpad-Ankleshwar area to Surat can only be deemed a temporary measure and that the continued cultivation of 1A cotton in the Olpad-Ankleshwar area is contrary to the approved policy of the Government of Bombay to introduce one superior strain of cotton, throughout the whole of that portion of South Gujerat which lies south of the river Nerbudda" .. 13

Marketing of Indian Cottons in England.

4. "The Central Cotton Committee desire to express their appreciation of the interest taken by the Manchester Cotton Association, Ltd., and the Federation of Master Cotton Spinners' Associations, Ltd., Manchester, in increasing the use of Indian cottons in Lancashire and to assure these Associations of its full co-operation in any measures designed to broaden the demand for Indian cottons and so benefit the Indian producer. The Committee feel, however, that an essential preliminary to any such development is the amendment of the Empire Futures Contract so as to provide an adequate hedge for superior Indian cottons and would emphasise the importance of their previous representations to the Liverpool Cotton Association in this connection" 21

Amendment of Rule 7 of the Rules under the Cotton Ginning and Pressing Factories Act.

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5. " That the Central Cotton Committee approve of the decision of the Joint Meeting between representatives of the East India Cotton Association and local members of the Cotton Ginning and Pressing Factories Sub-Committee that, in order to alleviate any hardship inflicted upon the cotton trade as a result of the rules for marking of bales under the Cotton Ginning and Pressing Factories Act, only such bales in a tender as are unmarked or wrongly marked should be liable to rejection and penalty on arbitration and not, as at present, the whole tender of which such bales may form a part. The Committee request the East India Cotton Association to make the necessary alterations in their rules to embody this decision" 22

6. " That the Central Cotton Committee inform the Government of India that the redraft of rule 7 of the rules notified under the Cotton Ginning and Pressing Factories Act is accepted both by the East India Cotton Association and by the Indian Central Cotton Committee and that the Government of India be requested to issue the necessary notification as soon as possible" .. 23

7. " That the Central Cotton Committee request the Government of India to impress upon Local Governments the necessity of strict enforcement of the provisions of the Cotton Ginning and Pressing Factories Act and Rules thereunder relating to the marking of bales in up-country presses and the importance of adequate penalties being imposed in established cases of non-observance of the Act and Rules or of faulty marking of bales" .. 23

Report of the Agricultural Research Sub-Committee.

8. " That the Report of the Agricultural Research Sub-Committee be adopted 26

9. " That the Central Cotton Committee approves the formation of a permanent ' Malpractices Sub-Committee ' of the Indian Central Cotton Committee to deal with all references to such malpractices and abuses as are adversely affecting Indian cotton. This Sub-Committee should consist of the Vice-President and six members of the Indian Central Cotton Committee with power to co-opt additional members—whether members of the Central Cotton Committee or not—representative of different sections of cotton interests in India. The Central Cotton Committee further recommends that this Sub-Committee should consider, as early as possible, the efficiency of all measures, legislative or otherwise, already adopted to check these malpractices and should examine in detail the advantages of legislative measures towards the licensing of gins and presses in India in this connection " .. 36

10. " That the following members be appointed to form the Malpractices Sub-Committee :—

Mr. S. D. Saklatvala,

Major W. Ellis Jones,

Sir Purshotamdas Thakurdas,
Mr. G. C. R. Coleridge,
Rao Bahadur Bhimbhai Ranchodji Naik,
Mr. T. G. Ralli and
Mr. T. F. Main" .. .. Page 37

11. "That, in view of the extreme importance of the supply of seed of established improved varieties of cotton being made readily and cheaply available to the cultivators, the Central Cotton Committee invite Local Governments and Directors of Agriculture to submit proposals based on local requirements, whereby the Committee could assist, by the provision of staff or funds—or in any other way in the wider distribution of the seed of improved varieties of cotton to the cultivators" .. 37

12. "That the Central Cotton Committee feel most strongly that the practical value of any successful research accomplished as a result of schemes financed from the Committee's grants depends entirely on these results being widely broadcast and subsequently incorporated in general agricultural practice. The Committee therefore consider that, as soon as any of the Committee's research schemes produce results which constitute a definite advance to cotton growing for any particular area or tract, the Committee should take steps to discuss, in consultation with the Provincial Cotton Committee, Divisional Cotton Committee or Durbar and the local authority directly responsible for agricultural development, the best methods of extending these results in practice and, in particular, what practical assistance would be most welcomed from the Committee for the work in question". 38

Report of Agricultural Research Sub-Committee on new grants.

13. "That the Agricultural Research Sub-Committee's Report on new grants be adopted" 39

Report of Agricultural Research Sub-Committee on the Research Scholarship Scheme of the Indian Central Cotton Committee.

14. "That the Agricultural Research Sub-Committee's Report on the research scholarship scheme of the Committee be adopted" 40

Report of Agricultural Research Sub-Committee on Research Scholars.

15. "That the Agricultural Research Sub-Committee's Report on Research Scholars be adopted" 40

Report of the Standing Finance Sub-Committee.

16. "That the Report of the Standing Finance Sub-Committee be adopted."

"That the revised estimates for 1929-30 as now amended be sanctioned.

" That the budget for the pay of Government Officers for 1930-31 be approved." Page

" That the Auditors' fee for 1929-30 be fixed at Rs. 1,000" .. 42

17. " That the President, Vice-President and Secretary of the Indian Central Cotton Committee, Sir Purshotamdas Thakurdas and the members of the Standing Finance Sub-Committee of the Indian Central Cotton Committee should form a panel from which three should represent the Committee at meetings of the Governing Body of the Institute of Plant Industry, Indore" .. 42

18. " That the Central Cotton Committee approve of the Standing Finance Sub-Committee's decision that, in future, the Committee should not limit their expenditure to pure agricultural and technological research but should be competent to devote energy and funds to extension, demonstration and propaganda work with the object of establishing the results of their successful research schemes in the general agricultural practice of the cotton growing tracts. If the provision of section 12(2) of the Cotton Cess Act in any way precludes the Committee from extending its activities or utilising its funds for such purposes, the Government of India should be requested to amend the Act in order to give effect to the proposal contained in this Resolution" .. 42

Mixing of Punjab-American cotton.

19. " That the Indian Central Cotton Committee recommends that the Malpractices Sub-Committee should devote their immediate attention to the question of the mixing of Punjab-American cotton" 54

Watering of Hubli and Gadag cottons.

20. " That the Central Cotton Committee desire to draw attention of the Government of Bombay to the increasing malpractices of watering of cotton in the Hubli and Gadag markets and to surrounding areas. The Committee cannot sufficiently condemn this abuse which must inevitably lead to the lowering of the value of the cotton in the tract affected and react most unfavourably on the grower" 55

Cotton Transport Act—Central Provinces.

21. " That the Central Cotton Committee cordially approves the proposals submitted by the Central Provinces and Berar Government for the application of the Cotton Transport Act to a combined Central Provinces and Berar area consisting of the civil districts of Buldana, Akola, Amraoti, Yeotmal, Chanda, Wardha, Nagpur, Chindwara, Seoni and Bhandara. The Committee however trust that the prevention of the importation of inferior cotton from Khandesh and Central India by rail only—as is the object of the notification—will only be a preliminary to complete regulation of road transport also in order to afford full protection to the cotton growers in the protected area" .. 58

Cotton Marketing—Hyderabad Agricultural Markets Bill.

Page

22. " That the Central Cotton Committee cordially approve of the decision taken by H. E. H. the Nizam's Government to introduce an Agricultural Markets Bill on the lines of the Berar Cotton and Grain Markets Law (1897) and the Bombay Cotton Markets Act (1927). The Committee consider that such action constitutes a very commendable step in the direction of removing the disabilities under which the cultivator at present labours in disposing of his produce and trust that it will result in the multiplication of organised cotton markets throughout the state." 60

Egyptian Scheme of Loans on security of cotton to assist the small producer.

23. " That the Central Cotton Committee consider that the details of the Egyptian Government 's scheme for the granting of loans on security of cotton in order to assist the small producer are of great interest and importance to India. The Committee feel that the information collected by the Committee with regard to this scheme should be brought to the notice of the Government of India and Local Governments with a request that the details of the scheme be communicated to Co-operative Institutes, Central Co-operative Banks and similar institutions in each province interested in the finance and marketing of the cotton crop" .. 64

Progress Report of Director, Technological Laboratory.

24. " That the Progress Report of the Director, Technological Laboratory, be adopted." 68

25. " That the Central Cotton Committee request the Technological Research Sub-Committee to consider most carefully, at the earliest opportunity, means whereby the Committee's Technological Laboratory could be made of more practical use to the cotton trade, without, in anyway, reducing the present value of the Laboratory to the cotton breeders of Provincial Agricultural Departments" 71

Report of Technological Research Sub-Committee.

26. " That the Report of the Technological Research Sub-Committee be adopted" 72

Cotton Ginning and Pressing Factories Pools.

27. " That the Central Cotton Committee consider that the papers on the subject of Cotton Ginning and Pressing Factories Pools, submitted to this meeting should be referred to the Malpractices Sub-Committee for the preparation of a report indicating what steps are necessary and feasible to stop abuses of Cotton Ginning and Pressing Factory pools, if any" 75

APPENDIX I.

SUBJECT 3.—*Comments of the Government of India on the Annual Report of the Committee.*

Copy of letter No. 2149-Agri., dated the 20th December 1928, from the Joint Secretary to the Government of India, Department of Education, Health and Lands, New Delhi, to the President, Indian Central Cotton Committee, Bombay.

SUBJECT :—*Annual Report of the Indian Central Cotton Committee for 1928.*

I am directed to acknowledge, with thanks, the receipt of 15 copies of the above-mentioned report, which were forwarded with Mr. Ritchie's letter No. 1306, dated the 24th November 1928. The Government of India have read the Report with great interest, and consider that it shows that the Indian Central Cotton Committee have done another year's excellent work. I am to acknowledge on Government's behalf the valuable services rendered by the Members and Secretary of the Committee throughout the year to which the Report relates.

APPENDIX II.

SUBJECT 5.—*Changes in personnel of the Committee and Sub-Committees.*

Secretary's Note.

The following changes in the personnel of the Committee have taken place owing to the annual retirement of one-third of the members or owing to resignation :—

Mr. T. G. Ralli replaces Mr. A. Fotiadi as the representative of the Bombay Chamber of Commerce.

Mr. H. A. Wilkinson replaces Mr. S. H. Taylor as the representative of the Upper India Chamber of Commerce.

Mr. Girija Prasanna Chakravarty takes the place of Mr. B. K. Lahiri as the Bengal commercial representative.

Mr. K Sarabha Reddi Garu replaces Mr. B. P. Sesha Reddi Garu as one of the Madras cotton-growers' representatives.

Rao Saheb C. S. Shirahatti takes the place of Mr. Bakshi Darshan Singh as one of the Bombay cotton-growers' representatives.

No appointment* has yet been made in the place of Rao Bahadur Bhimbhai M. Desai.

2. On the Standing Finance Sub-Committee, Mr. Ralli took the place of Mr. Fotiadi. Mr. W. Ellis Jones proceeded out of India from March 23rd to July 12th 1929 and the Standing Finance Sub-Committee, by resolution, decided to treat his absence as a casual vacancy and appointed Sir S. B. Mehta, Kt., C.I.E., in his place in accordance with the Rules under Section 16 of the Cotton Cess Act. Seth Kasturbhai Lalbhai proceeded out of India from 11th May to 15th August 1929. The Sub-Committee decided to keep his vacancy unfilled.

3. On the Local Sub-Committee, Mr. Ralli replaced Mr. Fotiadi and an additional appointment of Sir S. B. Mehta, Kt., C.I.E., was made by resolution of the Sub-Committee. The casual vacancies of Mr. W. Ellis Jones and Seth Kasturbhai Lalbhai remain unfilled.

4. On the Cotton Ginning and Pressing Factories Sub-Committee, Messrs. Ralli and Wilkinson were appointed, by resolution, to the vacancies caused by the resignation of Messrs. Fotiadi and Taylor.

5. Mr. G. C. R. Coleridge has been co-opted a member of the Agricultural Research Sub-Committee.

APPENDIX III.

SUBJECT 6.—*Cotton Transport Act—Bombay Presidency.*

Secretary's Note.

(*a*) *Surat Areas.*—The following resolution was passed at the last meeting of the Indian Central Cotton Committee in December 1928, and was forwarded to the Government of Bombay :—

Resolution 9.—" The Central Cotton Committee regrets that owing to the change in the ministerial portfolios the Government of Bombay was unable to move in the

* Mr. K. I. Thadani, Botanist, Sakrand Station, since appointed.

September session of the Legislative Council the resolution regarding the re-imposition of restrictions on the road transport of cotton in the Surat area, but the Committee now trusts that in view of its urgency every effort will be made to place the matter before the coming session of the Council."

2. The following letter and enclosures have now been received from the Government of Bombay :—

Copy of letter No. 3798-A/24, dated the 22nd April 1929, from the Under Secretary to the Government of Bombay, Revenue Department, Bombay, to the Secretary, Indian Central Cotton Committee, Bombay.

With reference to the correspondence ending with your letter No. 3281, dated 26th March 1929, I am directed by the Government of Bombay (Transferred Departments) to state that the resolution regarding the re-imposition of restrictions on the transport of cotton in the Surat area was not moved during the last session of the Legislative Council. In this connection, I am to forward copies of the letters from the Registrar of Co-operative Societies No. A.S.C.9, dated 15th and 26th March 1929, and to request you to favour Government with the views of the Indian Central Cotton Committee on the proposals contained therein.

Enclosure 1.

Copy of letter No. A.S.C.9 of 1929, dated 15th March 1929, from the Registrar, Co-operative Societies, Bombay Presidency, Poona, to the Secretary to the Government of Bombay, Revenue Department.

COTTON TRANSPORT ACT.

Restriction on the transport of cotton by road in the Surat District.

I have the honour to request reference to Government Memorandum No. 3798-A-24 of the 19th October 1927, on the above subject and to the proceedings of the two meetings held at Surat and Bombay on 29th January and 10th March 1928 respectively in connection therewith and to forward herewith copy of a letter* No. 211 of 28th January 1929, from Mr. Purushotam I. Patel, District Honorary Organizer, Co operative Societies, Sonsek, from which it will be seen that some of the cultivators in the Olpad Taluka are not yet convinced of the superiority of 1027-A.L.F. cotton over the selection A (1) cotton and that they lose much by growing the former variety. Apart from the question whether the 1027-A.L.F. cotton is superior or not to selection A (1) cotton, I think that if the cultivators are once convinced by indisputable facts and figures that they stand to gain by growing a particular variety, sooner or later they are sure of their own accord to grow that variety. No compulsion, direct or indirect, is needed for this purpose, but on the contrary, if used, it is likely to prejudice the case of that variety which is sought to be spread. In this particular case of selection A (1) cotton, which some of the cultivators of Olpad grow as they find it to be more paying than 1027-A. L. F., I am of opinion that the cultivators should be left free to grow whichever variety they think best and should at the same time be given such facilities to market their produce as are not inconsistent with the policy of the Agricultural Department. In this connection I have to invite reference to letter No. 3912 of the 28th February 1928 from the Secretary, Indian Central Cotton Committee, Bombay, to the Deputy Secretary to Government, Revenue Department (a copy of which was forwarded to me under Government memorandum No. 3798-A/24 of the 3rd March 1928) and to state that the proposals made by the Committee in paragraph 4 thereof for giving licenses to growers of cotton in Olpad and other places seem to be fair to all concerned. I have therefore the honour to request that Government may kindly be moved to direct that the Olpad Co-operative Cotton Sale Societies, even if they grow cotton other than 1027-A.L.F. should be allowed to bring their cotton for sale to the Surat Market on the following conditions—

(1) that only the half-pressed bales of cotton (without seed) are taken to Surat for being pucca pressed at one of the Presses there in which lint belonging to businessmen and others, except that belonging to cotton sale societies, shall not be allowed to be pressed;

(2) that the societies arrange to mark their cotton as recommended by the Indian Central Cotton Committee; and

(3) that the societies undertake not to sell any part of their lint unless it is pucca pressed.

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* Not printed.

This arrangement will not interfere with the spread of 1027-A.L.F. cotton and will also prevent admixture of the two varieties.

I have the honour to request that Government orders on this question as also on the general question of imposing restrictions on transport of cotton by road in the Surat District may kindly be issued at an early date.

Enclosure 2.

Copy of letter No. A.S.C.9 of 1929, dated the 26th March 1929, from the Registrar, Co-operative Societies, Bombay Presidency, Poona, to the Secretary to the Government of Bombay, Revenue Department, Bombay.

COTTON TRANSPORT ACT.

Restriction on the transport of cotton by road in the Surat District.

In continuation of my letter No. A.S.C.9 of the 15th instant on the above subject, I have the honour to state that Mr. Purushottam I. Patel, District Honorary Organiser, Co-operative Societies, Sonsek, wishes to organise a Co-operative Cotton Press at Surat to press the cotton bales of the cotton sale societies in the Surat District, particularly those of Olpad and Chorasi talukas. If such a press could be organised, it would obviate any inconvenience to the cotton sale societies that might be caused by the imposition of the first of three conditions mentioned in my letter under reference. Mr. Patel, however, wants to be assured that the Cotton Transport Act or any other legislative measure will not in any way prevent the sale societies from bringing their cotton to Surat for the purpose of pressing. I agree with Mr. Patel that such an assurance is necessary before taking any steps towards the organisation of the cotton press. I have, however, informed him that I am unable to say anything definite on the point until Government Orders on the whole subject are issued.

2. I have the honour to request that the above fact may kindly be taken into consideration while issuing Government order on the subject.

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3. The Government of Bombay's letter and enclosures were placed before the Local Sub-Committee at its 50th meeting on May 14th, 1929, together with a brief history of the case, a copy of which is attached to this note for reference.

The Sub-Committee decided that the terms of the Committee's original resolution* recommending the Government of Bombay to reintroduce the restrictions on road transport should be adhered to and that the Government of Bombay should be informed accordingly. At the same time, the Sub-Committee agreed that it should be pointed out that, if a co-operative press was organised to press the cotton of the Co-operative Cotton Sale Societies in Olpad and Chorasi talukas, such a press would be most conveniently situated north of the Tapti and *not*, as proposed, at Surat.

With regard to the letter from the District Honorary Organiser, Co-operative Societies, Sonsek, giving figures to show that the cultivation of Surat 1A cotton had proved more profitable to the growers than the cultivation of 1027, the Sub-Committee decided that these figures should be submitted to the Director of Agriculture, Bombay Presidency, for his remarks thereon.

**Resolution 2.*—" That the Central Cotton Committee note with satisfaction that the Government of Bombay has definitely adopted the policy of introducing one superior strain of cotton throughout the whole of that portion of South Gujerat which lies south of the river Nerbudda. It is with regret that the Committee note that the conditions attached to the revised notification under the Cotton Transport Act passed by the Legislative Council in July 1926 have not been fulfilled and that the organised distribution of inferior seed by the Sonsek group of Co-operative Societies has been continued. The condition that the restrictions on road transport between the three Surat zones would be re-imposed if any area was found to continue to grow inferior cotton, was made part of the notification by the Legislative Council with the object of protecting the interest of cultivators in other parts of the District. The Committee consider that the restrictions on road transport between the Olpad-Ankleshwar and Surat zones should be re-introduced for the cotton season 1928-29 and maintained, as indicated in the notification, until the growing of inferior cotton in the Olpad-Ankleshwar area has been discontinued. The cotton and *kapas* of *bona fide* growers of the Surat 1027 variety should be permitted to enter the Surat zone under license."

4. Accordingly, the following reply was sent to the Government of Bombay :—

Copy of letter No. 4212, dated the 22nd May 1929, from the Secretary, Indian Central Cotton Committee, Bombay, to the Secretary to the Government of Bombay, Revenue Department, Bombay.

I have the honour to refer to your letter No. 3798-A/24, dated the 22nd April 1929, on the above-noted subject, forwarding copies of letters from the Registrar, Co-operative Societies, Bombay Presidency, No. A.S.C. 9 of 1929, dated the 15th and 26th March.

2. Your letter with the accompanying correspondence was placed before the Local Sub-Committee of the Indian Central Cotton Committee at its meeting on the 14th May 1929, and I am directed to state that the Sub-Committee agreed unanimously that the terms of the Resolution (*see* foot-note on page 83) passed at the 16th meeting of the Indian Central Cotton Committee—and communicated to you under this office No. 2718 of 1928, dated the 11th January 1928—should be adhered to and that, accordingly, the restrictions on the road transport of cotton in the Surat area should be re-imposed as soon as possible.

3. My Sub-Committee, in arriving at this decision, carefully considered the request of the Registrar, Co-operative Societies, that the cotton growers of the Olpad-Ankleshwar area should be permitted to bring their cotton to Surat for sale under certain conditions, but they were unable to agree that the interests of the cultivators of the Surat District should be jeopardised by such considerations for the wishes of a small minority of cotton growers north of the Tapti by whom the cultivation of an inferior variety of cotton is found profitable only because it benefits by the just reputation of a superior (1027) variety, grown on a considerably larger scale. At the meeting of my Sub-Committee, it was emphatically stated that unless the restrictions on road transport were fully re-imposed, the result might easily be the complete depreciation of the 1027 crop of Surat District.

4. My Sub-Committee also gave careful consideration to the letter No. A.S.C. 9 of 1929, dated the 26th March 1929, from the Registrar, Co-operative Societies, Bombay Presidency, regarding the proposal of the District Honorary Organiser, Co-operative Societies, Sonsek, to organise a Co-operative Cotton Press at Surat to press the cotton bales of the Cotton Sale Societies in the Surat District and desiring an assurance that the provisions of the Cotton Transport Act or any other legislative measure will not in any way prevent the Sale Societies from bringing their cotton to Surat for the purpose of pressing.

I am directed to point out, however, that in so far as the Societies in the Olpad-Ankleshwar area are concerned, there appears to be no justification for the selection of Surat as the site for such a co-operative press which would be much more suitably placed north of the river Tapti where no conflict with the provisions of the Cotton Transport Act would be possible.

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5. At the same time, a copy of the letter from the District Honorary Organiser, Co-operative Societies, Sonsek, giving figures, purporting to show that the cultivation of Surat 1A cotton was more profitable to the growers than the cultivation of 1027 was sent to the Director of Agriculture, Bombay, with a request that the Committee might be favoured with his remarks thereon. A copy of his reply is given hereunder :—

Copy of letter No. 22/6430 of 1929, dated the 30th May 1929, from the Director of Agriculture, Bombay Presidency, to the Secretary, Indian Central Cotton Committee, Bombay.

SUBJECT.—*Cotton Transport Act—Surat District.*

In reply to your letter No. 4214, dated 22nd May 1929, I have the honour to invite reference to Government Resolution, Revenue Department, No. 3798/24, dated 12th January 1926, which contains a long letter No. 188, dated 16th June 1925, addressed by my predecessor to Government, Revenue Department, Bombay, which deals comprehensively with the relative merits of the two cottons 1027 A.L.F. and 1A.

If Dr. Mann was correct in his statements then the Sonsek Society's figures cannot carry much weight and in any case the comparison has been conducted in a manner which makes the results of little value, as the conditions in the villages are different and the conclusions therefore are not proved.

For some years past this Department has grown practically no 1A and hence I have no recent yield figures connected with it.

Dr. Mann's letter, referred to above, was considered fully by the Local Sub-Committee in 1925, who submitted the following report, summarizing the situation, to the 11th meeting of the Indian Central Cotton Committee (July 1925) when it was adopted unanimously.

Report of Local Sub-Committee on Cotton Policy in Surat.

"We consider that the Central Cotton Committee should support the Director of Agriculture's conclusion that the 1027 variety should be maintained for the following reasons:—

(1) It is a fundamental principle in the introduction of new crops into general cultivation that the variety chosen should be suitable for a large compact area in order that the produce may come on to the market in sufficiently large commercial quantities. Except in very rare cases small supplies do not secure a wide market and fail to secure their full intrinsic value. The cotton tract south of the Narbudda is relatively small and the general interests of the cultivators indicate that a single variety should be grown throughout it, if possible.

(2) It is the 1027 A.L.F. variety that is responsible for the present improved reputation of Surat cotton.

(3) The 1027 variety is in good demand from Indian mills and also for export and has been shown by spinning trials to be suitable for Lancashire use thus ensuring a steadying influence on prices.

(4) The Surat 1A variety being shorter in staple comes in quite another class (test results indicate that 1027 is suitable for 28-30s twist, Surat 1A 20-22s), is not of the same value for export and so far as Indian mills are concerned falls in a class for which the supply of cotton is much more adequate.

(5) At present Sonsek cotton, which is impure 1A, has obtained an inflated price through being sold as "Farm cotton" which it is not. Even so the difference in the financial returns per acre are so small as to be negligible whilst it follows from what has been said above that the future prospects of 1027 are far better than for the inferior stapled variety 1A.

(6) The Baroda and Rajpipla States are co-operating in establishing 1027 in their areas which are much inter-locked with those of the Surat District. It is unlikely that they would agree to substitute an inferior cotton for one which has done them well.

(7) The 1027 variety has from the first been popular in the area south of the Tapti and has made real progress in Ankleshwar. The Surat 1A variety could not be forced on these cultivators. If 1A is to be grown in Olpad it would necessitate the most rigorous enforcement of the Cotton Transport Act and the formation of a separate Olpad zone. It is extremely doubtful if this would be possible.

(8) It is of course open to the Sonsek Co-operative Cotton Sale Society to grow any cotton it likes but we do not consider that they should receive any support from Government in a policy which is contrary to the interests of the majority of the cultivators of the tract. The Surat Government Farm serves the whole district (and to certain extent the whole division) and its area is none too large. The cotton area in Surat is 175,000 acres and if Rajpipla, Baroda and the cis-Nerbudda portion of Broach District be included the cotton area served by the Farm is 510,000 acres whilst the area which is stated to want Surat 1A is only 15,000 acres. We do not consider that there is any justification for diverting the farm from its proper function to meet what may prove to be an entirely temporary demand from a small portion of the area.

(9) In our opinion, any attempt to re-introduce the 1A variety in Surat would be retrograde."

The reasons advanced by the Local Sub-Committee for the sole cultivation of 1027 in the Surat area appear to be as applicable to-day as in 1925.

6. The only alternative to complete re-imposition of road restrictions in the Surat protected area is the introduction of the proposals of the Registrar, Co-operative Societies, to allow *any* ginned cotton to cross the Tapti southwards subject to the three conditions mentioned by him in his letter No. A.S.C. 9, dated the 15th March 1929.

These restrictions are :—

(1) that only half pressed bales of lint are taken to Surat for being pucca pressed at one of the presses there in which lint belonging to businessmen and others, except that belonging to cotton sale societies, shall not be allowed to be pressed,

(2) that the societies arrange to mark their cotton as recommended by the Indian Central Cotton Committee,

(3) that the societies undertake not to sell any part of their lint unless it is pucca pressed.

The Director of Agriculture, Bombay Presidency, desires to obtain the opinion of the Committee upon these proposals, in connection with which he has written as under :—

Copy of letter No. 22/7231 of 1929, dated 15th June 1929, from the Director of Agriculture, Bombay Presidency, to the Secretary, Indian Central Cotton Committee, Bombay.

In continuation of this office number 22/6430, dated 30th May 1929, I have the honour to request you to let me know what the Local Sub-Committee thinks of the proposals of the Registrar of Co-operative Societies to allow *any* ginned cotton to cross the Tapti southwards subject to the three conditions mentioned by him in his letter No. A.S.C. 9, dated 15th March 1929.

2. This proposal eliminates the trouble of the South Tapti area becoming contaminated through the medium of the seed supply—but there remains the possibility of this transported cotton being passed off as 1027 A.L.F. cotton. This, however, should not happen if the Mills and the Trade generally are careful to make use of the " marks " to be placed upon the bales.

3. The chances of mixing lint do not appear to be very great if the total cotton transported across the Tapti is tallied with the total cotton exported from Surat bearing the specified marks.

4. Of course it would be preferable not to allow any cotton to cross the Tapti but the point which I am anxious to get cleared up is whether the proposal is satisfactory from the standpoint of protecting the interests of the South Tapti-grown cotton or would this practice, if adopted, react unfavourably upon the South Tapti-grown cotton in some form or other.

The main objection appears to be that the "special marks " to be placed upon the cotton imported from north of the river, even if such marking is rigidly enforced, will not be taken careful cognisance of by the mills and the trade generally and that, as a result, the 1A cotton will continue to pass off as " Farm " Surat cotton and will continue to fetch an artificially enhanced price owing to the reputation of the improved variety. If this should occur, there appears to be every reason to fear that the cultivation of 1A, owing to its increased yield and its higher ginning percentage, will increase and spread south of the Tapti and into Baroda State. The result will almost certainly be the complete depreciation of the 1027 crop and a repetition of the critical condition of the cotton crop in the Surat District.

Cotton Transport Act—Surat District.

History of the case.

At the 14th meeting of the Central Cotton Committee, it was reported that the Government of Bombay, on the recommendation of the Director of Agriculture, had relaxed the restrictions in the notification under the Cotton Transport Act in so far as the transport of cotton by road between the three protected areas in Surat was concerned. In return, the Sonsek group of co-operative societies in the North Surat District had agreed to discontinue the supply of impure seed of Surat 1A to their members and to distribute 1027 A.L.F. seed. If this had been carried out, the policy of growing *one* improved variety (1027) in the whole of the area south of the Nerbudda would have been given effect to fully. The amended notification which was passed by the Bombay Legislative Council in July 1926 provided that the restrictions would be re-imposed if inferior cotton was found to be grown in anyone of the protected areas.

The Local Sub-Committee received indubitable evidence that the Sonsek Societies had not kept their side of the bargain. They were not only continuing to grow Surat 1A cotton but were carrying on propaganda in favour of this inferior variety in certain villages in the Surat protected area, south of the Tapti and in Baroda State. As a result the Local Sub-Committee represented to the Government of Bombay that the conditions

required by the notification had not been fulfilled and the *only logical course was to re-impose restrictions on the movement of cotton and* kapas *from the Olpad-Ankleshwar area into the Surat protected area.*

At the 16th meeting (12th to 14th December 1927) of the Central Cotton Committee, this subject was discussed and the following resolution was passed unanimously :—

Resolution 2.—" That the Central Cotton Committee note with satisfaction that the Government of Bombay has definitely adopted the policy of introducing one superior strain of cotton throughout the whole of that portion of South Gujerat which lies south of the river Nerbudda. It is with regret that the Committee note that the conditions attached to the revised notification under the Cotton Transport Act passed by the Legislative Council in July 1926 have not been fulfilled and that the organised distribution of inferior seed by the Sonsek group of Co-operative Societies has been continued. The condition that the restrictions on road transport between the three Surat Zones would be re-imposed if any area was found to continue to grow inferior cotton, was made part of the notification by the Legislative Council with the object of protecting the interest of cultivators in other parts of the District. The Committee consider that the restrictions on road transport between the Olpad-Ankleshwar and Surat Zones should be re-introduced for the cotton season 1928-29, and maintained, as indicated in the notification, until the growing of inferior cotton in the Olpad-Ankleshwar area has been discontinued. The cotton and *kapas* of *bona fide* growers of the Surat 1027 variety should be permitted to enter the Surat zone under license."

The Committee felt that much harm was being done to the cotton growers of the Surat tract in general by the continued growth of the inferior Surat 1 A variety and that, if this was not checked, the price offered for 1027 A.L.F. would be much lower than the merits of that cotton in a pure state warrant. This action, on the part of the Committee, was confirmed at the 17th meeting (30th and 31st July 1928) when the following resolution was passed :—

Resolution 2.—" The Central Cotton Committee desire to impress on the Government of Bombay the urgent consideration of the resolution passed at the last meeting which asked for the re-imposition of the restriction on road transport between the Olpad-Ankleshwar and Surat zones for the cotton season 1928-29 and for the maintenance of the restriction as indicated in the notification until the growing of inferior cotton in the Olpad-Ankleshwar area is discontinued."

The necessity of re-imposing the restriction on road transport was emphasised and it was stated that, unless this was done, the Act might be done away with altogether. The Director of Agriculture, Bombay, stated that he had received intimation from Government that they meant to re-impose the restrictions and that the matter would come before the October session of the Council.

At the 18th meeting of the Central Cotton Committee (11th and 12th December 1928), the Committee were informed that, owing to changes in the portfolios in the Bombay Government during July, August and September the question of re-imposition of the restrictions on road transport between the Olpad-Ankleshwar and Surat zones had *not* been placed before the Council meeting in October. The Committee passed the following resolution :—

Resolution 9.—" The Central Cotton Committee regrets that owing to the change in the ministerial portfolios the Government of Bombay was unable to move in the September session of the Legislative Council the resolution regarding the re-imposition of restrictions on the road transport of cotton in the Surat area, but the Committee now trusts that in view of its urgency every effort will be made to place the matter before the coming session of the Council."

This resolution was forwarded to the Government of Bombay on the 18th December 1928.

(*b*) KUMPTA-DHARWAR AREA.—The following resolution was passed at the 17th meeting (July 1928) of the Indian Central Cotton Committee :—

Resolution 4.—" The Indian Central Cotton Committee note with satisfaction that the Bombay Government have given effect to the resolution passed at the last meeting of this Committee regarding the establishment of a limited number of road check stations to prevent inferior cotton gaining entrance into the Kumpta-Dharwar protected area. The sixteen stations fixed for the Kumpta-Dharwar, Bagalkot and Bijapur areas should have the effect of tightening up the administration of the Act. It has been represented to the Committee, however, that inferior cotton is being imported through the Indian States of the Southern Mahratta Country to the principal cotton

markets of those States. The States which form the North-East and Eastern boundaries of the Kumpta-Dharwar protected area are included in the area. The Committee endorse the recommendation of the Cotton Ginning and Pressing Factories Sub-Committee which proposed the establishment of a sufficient number of road check stations on the chief roads in British India in order to prevent cotton entering the protected area through those States."

2. The Director of Agriculture, Bombay Presidency, forwarded on the 2nd February 1929, a full list of all the check-stations in the Bagalkot, Bijapur and Kumpta-Dharwar areas.

These are as under :—

LIST OF CHECK-STATIONS IN THE BAGALKOT, BIJAPUR AND KUMPTA-DHARWAR AREAS UNDER THE COTTON TRANSPORT ACT.

(Sanctioned by Government Resolution No. 9786/24, dated 27th April 1928).

Belgaum District.

1. Telsang in Athani Taluka on the Bijapur-Miraj Road.
*2. Korkop in Parasgad Taluka on Bagalkot-Belgaum Road.

Dharwar District.

3. Konnur in Nargund Peta on Bijapur-Hubli Road.
4. Hirchal in Ron Taluka on Ron-Kaladgi Road.
5. Vadegolla in Ron Taluka on Gadag-Gajendrabad Road.
6. Halkeri in Ron Taluka midway between Gadag and Gajendragad.
7. Hesrur in Mundargi Peta on Gadag-Hospet Road.

Bijapur District.

8. Dhanur in Hungund Taluka
9. Sangam in do.
10. Hosur in Bagalkot Taluka
11. Sutgundur do.
12. Korti in Bilgi Peta

} Sanctioned as per Government Resolution No. 8030/24 of 17th December 1927, Revenue Department.

13. Dhulkhed in Indi Taluka on Bijapur-Sholapur Road.
14. Mannur in Indi Taluka on Indi-Mannur Road.
15. Devangaon in Sindgi Taluka on Sindgi-Devangaon Road.

Sholapur District.

16. Junoni in Sangola Taluka on Pandharpur-Miraj Road.

The following check-stations have been recommended to Government, Revenue Department, Bombay, in this office letter No. 181, dated 4th December 1928 in connection with the letter No. 7328 of 13th August 1928 from the Secretary, Indian Central Cotton Committee, Bombay, to Government, Revenue Department, Bombay.

Sholapur District.

1. Eklaspore on the Pandharpur-Mangalvede Road.
2. Brahmapuri on the Sholapur-Mangalvede Road.
3. Para on the Pandharpur-Jath Road.

3. The last three stations on the list, Eklaspore, Brahmapuri and Para have been recommended to the Government of Bombay, in accordance with the Resolution of the Indian Central Cotton Committee at its 17th meeting (noted above). The establishment of these check stations in the Sholapur district will, it is hoped, prevent the entrance of inferior Bavai and Sholapur cottons entering the protected area through the Indian States of the Southern Maratha Confederacy, which forms its Eastern and North-Eastern boundary.

The establishment of these three additional check stations has not yet been approved by the Government of Bombay who are making inquiries into the additional cost which their establishment will result in.

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* Now changed for Kajjidoni, Bagalkot Taluka, on Bagalkot-Belgaum Road.

4. By a Resolution of the Government of Bombay No. 9786/34, dated the 16th March 1929, the establishment of a check-station at Kajjidoni, Bagalkot Taluka, Bijapur District, in place of the one at Korkop in the Belgaum District was sanctioned.

The alteration was proposed by the Deputy Director of Agriculture, South Central Division, as Korkop was on the western side of the Kolhapur State area between the Belgaum and Bijapur districts. As this State area is also included in the protected Dharwar-Kumpta area, it was necessary to have a check-station on the eastern side of the States area between it and Bijapur; otherwise cotton from Bagalkot could enter the protected area and pass off as State cotton.

(c) BROACH.—At the last meeting of the Committee (11th-12th December 1928), the Director of Agriculture, Bombay Presidency, informed the Committee that proposals were before Government for the establishment of this new zone. He also stated that the compilation of a list of railway stations within the boundaries of the zone had now been completed.

The new zone is to be called the Nerbudda-Mahi zone and, in reply to a request for information as to the present position in regard to the establishment of the new protected area, the Government of Bombay have replied as under:—

Copy of letter No. 535-A, dated the 8th May 1929, from the Under Secretary to the Government of Bombay, Revenue Department, to the Secretary, Indian Central Cotton Committee.

Nerbudda-Mahi Zone—Cotton Transport Act. Creation of the —Under the—

With reference to your letter No. 3597 dated 16th April 1929, I am directed by the Government of Bombay (Transferred Departments) to state that the Baroda Darbar and the Indian States in the Rewa Kantha Agency are being consulted with a view to securing their co-operation in the scheme for the constitution of the new zone.

APPENDIX IV.

SUBJECT 9.—*The Marketing of Indian cottons in England.*

Secretary's Note.

1. The following letter was received from the Secretary, Federation of Master Cotton Spinners' Associations, Ltd., Manchester, enclosing a copy of a resolution recently adopted by the Federation in regard to extending the use of Indian cottons in England:—

Copy of letter dated the 8th February 1929, from the Secretary, Federation of Master Cotton Spinners' Associations, Ltd., to the Secretary, Indian Central Cotton Committee, Bombay.

"My Committee have recently had under consideration the question of improving the grades of Indian cotton, and thereby increasing the use of it in this country, with the result that the enclosed resolution has been adopted.

I was instructed to furnish a copy of the resolution to the Liverpool Cotton Association, the Manchester Cotton Association and the Indian Central Cotton Committee, and I should be obliged for your observations on the subject at your early convenience."

Copy of Resolution.

"That this Federation seeks the co-operation of the Liverpool Cotton Association, Ltd., the Manchester Cotton Association, Ltd., and the Indian Central Cotton Committee, on the following points, with a view to improving the grades of Indian cotton and increasing the use of it in this country:—

(*a*) The possibility of setting up definite and reliable Universal standards of grades or types.

(*b*) The possibility of setting up in co-operation with Bombay, Karachi, etc., an official type of deferred delivery contract in conjunction with (*a*) to enable spinners to purchase their necessary qualities with reasonable safety, for delivery spread over the year, instead of as at present—having to buy the year's requirements during a very short season and carry the cotton.

(*c*) To consider what joint action, if any, can be taken regarding the frequent practice in India of mixing in 'desi' cotton with good types, particularly with Punjab American.

In addition to being of great value to the Lancashire Spinning Industry, these reforms would reflect benefits on the growers."

2. Previous to the receipt of this letter, Mr. H. A. F. Lindsay, Indian Trade Commissioner, London, had informed us demi-officially that the question of improving the United Kingdom market for Indian cottons was being taken up by the Federation. The Indian Trade Commissioner mentioned the following which had been brought to his notice as deserving of consideration in this connection :—

(1) The general complaint that it is very difficult to do business in short stapled Indian cotton owing to the small quantities available.

(2) Spinners complain that they cannot count on continuity of supply from India. They may get sufficient for their requirements one season but cannot reckon on adequate supplies next season. The Lancashire spinner attaches much importance to this question of continuity of supply.

(3) Complaints of the variation in the quality of the same growth of cotton between one season and another. Mr. Lindsay suggests that if Universal standards could be laid down, the spinner would know better where he stood.

(4) The spinner using American cotton is not able to finance the whole of his annual supplies at one time. He uses a "deferred delivery contract" which enables him to draw supplies as required. It is suggested that the introduction of some such similar system would do much to popularise the use of Indian cottons in Lancashire. The Indian Trade Commissioner points out that the buying season in India is very short—either from January to April or from May to June—and, as the whole year's supplies have to be bought during this short season, more capital has to be locked up than can be afforded in present circumstances. On this account, some sort of "deferred delivery contract" for Indian cottons would be appreciated in Lancashire.

3. The resolution of the Federation and the points raised by the Indian Trade Commissioner were considered by the Local Sub-Committee in March 1929. It was felt that there should be no difficulty in selling on an extended contract in Lancashire and that any large exporting firm in Bombay or Karachi would be agreeable to undertaking such business. With regard to standards, the Committee subsequently received a request from the Manchester Cotton Association for a complimentary set of East India Cotton Association standards for Sind and Punjab cottons. Through the courtesy of the Board of the East India Cotton Association, replicas of the official standards of the Association for :—

(1) Fully Good M. G. Bengals contract
of M. G. Punjab—Superfine, Fine, Fully Good, Good to Fully Good (half a class off Fully Good), Good,

(2) Fully Good M. G. Broach contract
of M. G. Punjab-American—Superfine, Fine, Fully Good, Good, Fully Good Fair to Good,

have been prepared and despatched to Manchester. With regard to Sind cotton, which is generally available in the market at the beginning of the cotton season, it was too late, when the request was received, to prepare replicas for the current season. It has been arranged, however, that when the East India Cotton Association prepare their Official Standard Boxes of Sind cotton at the beginning of the cotton season (1929-30) a set will also be prepared for the Manchester Cotton Association.

With regard to paragraph (c) of their resolution, the Federation were informed that the harm done by the common practice of mixing "desi" cotton with good types, particularly with Punjab-American, was receiving the full attention of the Committee who, in co-operation with trade Associations, Local Governments, etc., is giving the closest consideration to means whereby this malpractice may be checked. The Local Sub-Committee also agreed that an invitation should be sent to Mr. H. A. F. Lindsay, Indian Trade Commissioner in London—at present in India—to attend this meeting of the full Committee in order that he might assist in the discussion on this subject and on any other proposals affecting the encouragement of the use of East Indian cotton abroad.

4. Formerly the Committee sent type bales of improved Indian cottons to the Liverpool and Manchester Cotton Associations in order to bring to the notice of spinners these improved varieties of Indian cottons, produced in commercial quantities. This practice was discontinued after a few years as it was felt that its object had been achieved. Representations were subsequently received from both the Manchester and Liverpool Cotton Associations regarding the inability of spinners in England to obtain supplies of the best of the Indian cottons. This question was discussed at the 16th meeting

of the Indian Central Cotton Committee (December 1927) when the following resolution was passed :—

Resolution 29.—" The Central Cotton Committee approve of the action taken by the Local Sub-Committee in regard to the representation received from the Manchester Cotton Association on the difficulty of obtaining improved Indian cottons. They would invite the attention of the Liverpool Cotton Association to this representation and to the fact that the Empire Futures Contract, as at present framed, does not provide an adequate hedge for superior Indian cottons. They would, therefore, ask that their previous representations on this point may receive further attention."

In the discussion it was pointed out that the demand for the best Indian cottons, *e.g.*, " Farm " Surat, in India was so great that these cottons are not likely to be shipped by Indian exporters except against specific orders. Further it was stated that Indian exporters were at a further disadvantage if they send these improved cottons to Liverpool for sale in that the Empire Futures Contract did not provide a satisfactory hedge, no separate standards for Indian cotton having been established for the purposes of the Empire Futures Contract.

The Liverpool Cotton Association met the views of the Committee with regard to the basis of valuation and amended their Contract Forms making the basis Low Middling instead of Strict Low Middling. At the 18th meeting of the Indian Central Cotton Committee (December 1928) it was reported that the Liverpool Cotton Association had prepared altered standards for East Indian cotton to come into force from the 1st September 1929. On inquiry it was ascertained that these altered standards did not affect in any way the Empire and Miscellaneous Future Delivery Contract and that, therefore, the request of the Committee in this connection had not been complied with.

APPENDIX V.

SUBJECT 7.—*Cotton Ginning and Pressing Factories Act.*

Proposed amendment to Rule 7 of the Rules under the Act.

Secretary's Note.

1. At its last meeting (December 1928), the Indian Central Cotton Committee passed the following resolution :—

Resolution 12.—" The Central Cotton Committee request the Government of India to take steps to amend section 4 (1) of the Cotton Ginning and Pressing Factories Act and Rule 7 thereunder as follows :—

Section 4 (1).—The owner of every cotton pressing factory shall cause every bale pressed in the factory to be marked in a clearly decipherable and identifiable manner, before it is removed from the press house, with a serial number, and with the mark prescribed for the factory.

Rule 7.—Every bale of cotton pressed in a cotton pressing factory shall be marked in such a manner that the serial number of the bale and the identity of the pressing factory shall be decipherable. The marks prescribed for the factory and the serial number shall be in English characters.

If the method of stencilling in ink be adopted, the marks shall be placed on a lashed side of the bale.

Stencilling on an end *hessian* or an unlashed side of a bale does not fulfil the requirements of this rule."

The resolution was duly forwarded to the Government of India for favourable consideration.

2. The following reply has been received from the Government of India :—

Copy of letter No. 236-C (24), dated the 11th April 1929, from the Joint Secretary to the Government of India, Department of Commerce, to the Secretary, Indian Central Cotton Committee.

SUBJECT.—*Proposed amendment of section 4 (1) of the Cotton Ginning and Pressing Factories Act, 1925, and of Rule 7 thereunder.*

" I am directed to refer to your letter No. 1710, dated the 17th December 1928, on the above subject.

2. In reply I am to say that the Government of India do not consider that an amendment of the Act is required for the purpose which your Committee has in view. I am to enclose a copy of the re-draft of Rule 7 which, in the opinion of the Government of India, would attain the object aimed at, but before finally adopting it, they would be glad to be informed whether your Committee consider it suitable."

"7(1) The Special Mark and the Serial Number shall be in English figures and letters and shall be clearly decipherable.

(2) If the Special Mark and the Serial Number are stencilled in ink, they shall be stencilled on the lashed side of the bale.

7(3) The stencilling of the Special Mark and the Serial Number on an end hessian or an unlashed side of a bale shall not be deemed to fulfil the requirements of this rule."

3. In a discussion on this subject, which I had with Mr. Woodhead, Secretary to the Government of India, Commerce Department, in Bombay on the 18th April, I suggested that the Government of India redraft of Rule 7 would require an introductory sentence as follows :—

"Every bale of cotton pressed in a cotton pressing factory shall be marked in the following manner :— "

Mr. Woodhead agreed that this addition was necessary.

4. The main difference between the Resolution passed at the 18th Meeting of the Indian Central Cotton Committee and the proposal now made by the Government of India is that the Government of India do not consider that any amendment of Section 4 (1) *of the Act*—as suggested by the Committee—is necessary. If this point of view is accepted, the alteration to Rule 7 can be made by a Gazette Notification. Any amendment of the Act itself will have to be submitted to the Legislative Assembly for sanction.

5. The Government of India's letter (No. 236-C(24) of 11th April 1929) and the proposed re-draft of Rule 7 of the Rules under the Cotton Ginning and Pressing Factories Act were considered at the 24th Meeting of the Local Sub-Committee on the 14th May 1929. The Sub-Committee considered that the proposed re-draft, submitted by the Government of India, afforded sufficient latitude to arbitrators on disputes arising from the marking of bales under the Cotton Ginning and Pressing Factories Act and Rules and that no amendment of the Act itself was necessary. However, it was decided that the re draft of Rule 7 submitted by the Government of India should be referred to the East India Cotton Association for opinion as to its suitability and that, at the same time, the East India Cotton Association should be informed that the redraft had the approval of the Indian Central Cotton Committee.

6. Action was taken accordingly and the following reply has been received from the Secretary, East India Cotton Association :—

Copy of letter No. 8342/A/53, dated 29th June 1929, from the Secretary, East India Cotton Association, to the Secretary, Indian Central Cotton Committee, Bombay.

"The Directors of this Association have considered the re-draft of Rule 7 relating to the marking of bales under the Cotton Ginning and Pressing Factories Act, as suggested by the Government of India and as communicated in your letter No. 4178 dated the 18th May last. My Board feel that the provisions of the Rule as embodied in clauses (1), (2) and (3) meet some of the requirements of the trade. Your Local Sub-Committee's proposal for the addition of an introductory sentence thereto would appear to detract from the utility of the amendment from the point of view of the cotton trade. In the event of a hundred bales of cotton being tendered against a forward contract, the effect of a single bale unmarked, by inadvertence, on the part of the press-owner, would be that the whole of the hundred bales would be liable to be declared not a fair tender under the existing by-laws of my Association. I am instructed by my Board to remind you that at present the Cotton Ginning and Pressing Factories Act is applicable only in the Bombay Cotton Market and not, for instance, in the Karachi Cotton Market, which has trading in forward cotton. The result of this is that a person importing unmarked bales in Karachi can tender same against a forward contract in that market. But it is not so with a person in Bombay who would be handicapped if he tendered similar unmarked cotton bales in Bombay. As you are aware under our existing Rules a bale not properly marked under the Cotton Ginning and Pressing Factories Act exposes the whole lot to rejection and to a penalty of Rs. 25 per candy

in addition. My Board consider this risk too severe and are not prepared to agree to any modification of the Rules which will continue to expose the trade in Bombay to this risk. They, therefore, suggest for the consideration of the Government of India, that under the Act itself, or under Rules made thereunder by the Governor General in Council, latitude should be left to arbitrators, in case of dispute, to compel the buyer of a lot to weigh over cotton, which may be declared by the arbitrators to be cotton of the description sold and coming from the District stipulated in the contract. Unless such a provision is inserted in these Rules, my Board seriously apprehend that great injustice will be done to the cotton merchants of Bombay, and they, therefore, are not prepared to approve the re-draft of Rule 7 under reference.

I am further instructed to remind your Committee that the machinery devised by Government to enforce the Cotton Ginning and Pressing Factories Act up-country, for the purpose of ensuring that all press-owners compulsorily mark every bale leaving their compounds, is still very far from being perfect. Further, cotton from Indian States continues to be marked in a very imperfect manner, and the penalty on factory owners for not marking cotton bales as required by the Act is, I understand, a nominal fine of Rs. 25 only. This is not by any means commensurate with the loss involved on the middlemen tendering cotton in Bombay, and I am instructed to convey to your Committee the earnest request of my Board that the Indian Central Cotton Committee will bring to the notice of the Government of India this very substantial hardship on cotton merchants tendering cotton in Bombay."

(Supplementary Note.)

(1) On receipt of the reply from the East India Cotton Association given *in extenso* in my original note on this subject—the *Vice*-President considered that it would be advisable to request the Association to send representatives to discuss this matter with the local members of the Cotton Ginning and Pressing Factories Sub-Committee prior to the subject being placed before the full meeting of the Indian Central Cotton Committee. The East India Cotton Association readily agreed to the suggestion and accordingly a joint meeting of representatives of the East India Cotton Association with local members of the Indian Central Cotton Committee was held on July 10th, 1929, to discuss the proposed amendment to Rule 7 under the Cotton Ginning and Pressing Factories Act.

The Minutes of this Special Joint Meeting are given below :—

MINUTES.

Present :

S. D. Saklatvala, Esq., *Vice*-President, Indian Central Cotton Committee.

Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., M.L.A., President, East India Cotton Association.

Haridas Madhavdas, Esq., *Vice*-President, East India Cotton Association.

G. Boyagis, Esq.

J. Vonesch, Esq.

T. G. Ralli, Esq.

D. Mehta, Esq., Secretary, East India Cotton Association.

W. J. Jenkins, Esq., Secretary, Indian Central Cotton Committee.

Mr. Saklatvala expressed the thanks of the Indian Central Cotton Committee to the representatives of the East India Cotton Association for their attendance at this joint meeting to discuss the proposed amendment to Rule 7 of the Rules under the Cotton Ginning and Pressing Factories Act relating to marking of bales. He said that this subject was to be considered at the full meeting of the Central Cotton Committee next week and that it was to the mutual advantage of the Committee and the Association that the point at issue should be fully discussed and examined beforehand. The history of the case was well known to all present. In December last, the Indian Central Cotton Committee made certain suggestions to the Government of India for the amendment of Section 4 (1) of the Cotton Ginning and Pressing Factories Act and of Rule 7 of the Rules under the Act relating to the marking of bales. The amendments suggested had the full approbation of the trade, *i.e.*, the East India Cotton Association and were considered to meet adequately their wishes with regard to the Act and Rules. In reply the Government of India had stated that, in their opinion, an amendment of the Act itself was unnecessary and that the objects aimed at could be suitably attained by a

re-draft of Rule 7 of the Rules under the Act. The Government of India accordingly suggested a re-draft of Rule 7 which differed in no material way from the Committee's recommendation in this respect. The Government of India's re draft of Rule 7 was considered by the Cotton Ginning and Pressing Factories Sub-Committee of the Indian Central Cotton Committee and was approved by them as suitable. However as the Committee was always desirous of carrying the opinion of the trade and of satisfying their wishes, it was agreed that the Government of India re-draft of Rule 7 should be submitted to the East India Cotton Association in order to make sure of their agreement and consent. However from the letter (No. 8342-A-53, dated the 29th June 1929) received from the East India Cotton Association, it is apparent that the Association does not approve of the re-draft of Rule 7 suggested by the Government of India and point out that this re-draft does not meet the case of unmarked bales. The Association desire that, under the Act or Rules thereunder, latitude should be left to arbitrators, in case of dispute, to compel the buyer of a lot to weigh over cotton which may be declared by the arbitrators to be cotton of the description sold and coming from the district stipulated in the contract *whether or not the bales are marked in accordance with the Act or Rules thereunder*. The question now was whether, keeping in view the spirit of the Act, it was possible for the Committee to approach the Government of India with a request that even unmarked bales should be tenderable as suggested by the East India Cotton Association. This was the first time that such a suggestion had been broached and the members of the Cotton Ginning and Pressing Factories Sub-Committee feel that if unmarked bales were allowed to be tenderable, the entire case is weakened and the main objects of the Act and Rules would be vitiated. The Spirit of the Act lay in the insistence that all *bales* should be marked.

Sir Purshotamdas Thakurdas said that, as representative of the East India Cotton Association, he must state that this matter was very thoroughly discussed by that body before their decision was arrived at. Reference to the Minutes of the last meeting of the Indian Central Cotton Committee would show that, although he supported the *Vice*-President's resolution for an amendment of Section 4 (1) of the Act and Rule 7 of the Rules thereunder he had stated that this resolution only satisfied him for the present and that, unless the Act in this sense, was made applicable to every market in India, he might find it necessary to put forward a representation from his Association to amend their rules accordingly. Mr. Panas had also stated at the same meeting that he doubted whether out of 12 lacs bales arriving in Karachi, 2 lacs were properly marked. On this account, unless the trade in Bombay could feel that the hardship to which they were being subjected was reasonably alleviated, he considered that he would have to move for the repeal of the Act. At present if a tender of 100 bales was made, out of which ten bales were accidentally unmarked, the whole lot could be rejected and a penalty of Rs. 25 per kandy imposed even although the other 90 bales were in every respect tenderable. It was essential that the trade in Bombay should no longer be exposed to such risk and the permanency of arrangements must be considered. The East India Cotton Association had therefore suggested that, in such cases of disputes over marking of bales, latitude should be given to the arbitrators on the lines noted in the Association's letter under consideration.

Mr. Boyagis said he had always been opposed to this Act on the grounds that it did not operate fairly and was a considerable handicap to business. As things were at present, the marking of bales was enforced in Bombay and not in Karachi and the result of this was that he had experienced difficulty in selling Karachi Cotton in Bombay as the lot would be liable to rejection and penalty if not properly marked. If the Act was to be enforced, it should be enforced everywhere.

Mr. Haridas Madhavdas said that, as the Act was introduced by Government and it had been laid down that all bales must be marked in the press, judgment should commence at the bottom and the press-owner should be held liable for *all* losses resulting from non-compliance with the provisions of the Act and Rules regarding marking of bales.

Sir Purshotamdas Thakurdas said that this view was held by a certain section of his Board but it was not feasible to throw back cotton on the press-owner. If power could be vested in the arbitrators he was certain that they would see that things were carried out in the spirit of the Act and that the trade would not suffer unjustly. It was said that the proposal of the East India Cotton Association would weaken the whole force of the Act but the practical issue was how the disadvantage to the trade, when a lot were rejected owing to one or two bales being unmarked, could be removed. It was quite unfair to subject middlemen in Bombay to this risk and the Committee could accept the assurance of the East India Cotton Association that arbitrators would make careful use of the latitude which it was desired to extend to them in connection with unmarked bales.

Mr. Saklatvala said that the Central Cotton Committee members would feel that the acceptance of the East India Cotton Association's proposal was the thin edge of the wedge and that the trade were desirous of doing away with the Act in its entirety.

Mr. Jenkins said that, in view of the fact that the Karachi Joint Cotton Committee had definitely promised to introduce similar rules to the East India Cotton Association rules regarding marking of bales into Karachi cotton market starting from 1st September 1929, one of the main objections, namely, the one sided effect of the Act on Bombay trade, would be removed. He considered that, if the rule could be modified so that only the unmarked or wrongly marked bales in a tender were liable to rejection and penalty and the others if judged to be according to tender could be passed, it would be advisable to give the amended Rules a further trial in order to see how they worked when enforced both in Karachi and Bombay markets.

Sir Purshotamdas Thakurdas said that the East India Cotton Association would be agreeable to giving such an amendment of the Rules a trial especially as Karachi were going to come into line with Bombay in this respect. It was essential however that the rule should be amended so that only the unmarked or wrongly marked bales were liable to rejection and *not* the entire lot tendered of which they formed a part. He thought that this matter should again be taken up with the Government of India who should be asked to make a suitable amendment to the Rule 7 under the Rules to provide for the suggested alteration in working.

This was agreed to.

APPENDIX VI.

SUBJECT 18.—*Agricultural Research.*

I. General Progress Report.

In the Committee's Budget for 1929-30, provision has been made for agricultural research grants to five Provincial Governments (Bombay, Punjab, Madras, Central Provinces, United Provinces), one Indian State (Hyderabad) and the Institute of Plant Industry, Indore. The total amount of these grants for the year is Rs. 4,52,665. This amount includes provision for fourteen research schemes (in addition to the Indore Institute), of which seven are mainly botanical, three entomological, three physiological and one mycological.

Seven of these schemes, namely, Dharwar Cotton Wilt, Dharwar Cotton Breeding, Surat Physiological, Surat Entomological, Central Provinces Botanical, Madras Botanical, United Provinces Entomological are now working on extensions granted by the Committee, the original sanctioned period having elapsed. Five schemes, namely, Khandesh Cotton Breeding, Sind Physiological, Punjab Botanical, Punjab Entomological, Hyderabad Botanical have not yet reached the end of the period originally sanctioned by the Committee. The Bombay Co-ordination of Cotton Research and the Madras Pempheres and Physiological Schemes have not yet commenced work. During the year, the Central Provinces Mycological Scheme was closed down (31st March 1929).

At this meeting, applications for extensions of the sanctioned period of the Committee's grant will be considered in connection with the Punjab Botanical Research Scheme (grant terminates August 1930) and Indore Institute of Plant Industry (grant terminates March 1930).

In addition, the Surat Entomological Research Scheme is due for review at this meeting with the object of deciding whether the full period of extension granted, *viz.*, till September 1930, should be confirmed.

2. In view of the fact that a detailed examination of the progress made under the Committee's agricultural research schemes is included in the agenda of this meeting, for which purpose special reports have been received with regard to each scheme, this General Progress Report will be confined to a brief resumé of the progress made during the past year.

Bombay.—In the Dharwar Cotton Wilt Research Scheme, last year's results on the effect of hot weather cultivation and applications of farm yard manure in reducing wilt attack have not been confirmed. The most promising work has been done in the direction of breeding strains of cotton resistant to wilt attack. The strains at present under investigation will require exhaustive testing in different areas of the Dharwar district. The *Dharwar Cotton Breeding Scheme on Upland American type* has not come up to expectations and there does not seem to be any advantage in its continuance. Such material as has been evolved could be taken over by the Cotton Breeder, Dharwar, for

further testing and it is recommended that the scheme be closed down. The *Khandesh Cotton Breeding Scheme* has made steady progress and the improved cotton Dhulia 1 has maintained its superiority over N. R. in a series of tests. The organisation of the seed distribution and extension of this improved variety is now the most important consideration. The *Surat Physiological Research Scheme* has now reached a stage when the actual cause of shedding, namely, the lack of elaborated plant-food at a definite critical period of growth, can be said to have been proved. Future investigations must follow two main lines, firstly, the investigation of practical economic measures of supplying the deficiency above-mentioned at the critical period of growth and secondly the testing of the heritability of boll-shedding as a character and the search for a cotton with a higher capacity of forming bolls from buds. *The Surat Entomological (Earias Boll-worm) Research Scheme* has now reached the stage of investigation of practical remedial measures to control the pest. Experiments in the carry-over of the pest from one season to another indicate that a clearing-up of the cotton fields after harvest would considerably reduce the attack and modifications of the cultivators' practice with this object in view are being worked out. *The Sind Physiological Research Scheme* has passed through the preliminary stages and definite lines of investigation are being followed up. It is still too early to make any comments upon the progress made. *The Scheme for the Co-ordination of Cotton Research in the Bombay Presidency* has not yet commenced but steps have been taken with the object of getting a first-class Botanist to assume charge of this most important work.

Punjab.—The Punjab Botanical Research Scheme is now in its fifth year and Mr. Trought has obtained promising results both in the isolation of pure lines of American cotton showing considerable improvement on 4F and apparently resistant to the factors inducing failure in other Punjab-American cottons and also in his investigations into the optimum sowing dates for American cotton in the Punjab. The problem is very complex but its solution is of immense importance and a further extension of the Scheme for five more years, as applied for by the Director of Agriculture, Punjab, is essential in view of the issues involved and the stage now reached in the research. *The Punjab Entomological Research Scheme* has now completed its third year. The most practical results centre round the experiments on seed treatment by exposure to the sun as a control of the pink boll-worm and further investigations in this direction are necessary.

Madras.—The Madras Botanical (Herbaceum) Research Scheme has continued with the testing of several of the new strains produced by the Cotton Breeder. Mr. Hilson, himself, is not confident of being able to obtain a strain from these which will produce lint fit for a higher standard warp count than 20's which does not come up to Karunganni. It is possible that time would be saved by reconstructing the scheme and proceeding forthwith to crossing the best material available with long-stapled varieties as the limit of improvement by selection appears to have been reached. *The Madras Pempheres and Physiological Scheme* has not yet been started as the necessary officers have not been obtained. A Selection Sub-Committee met in March 1929 and selected two applicants for the post of Physiological Botanist, both of whom subsequently withdrew their applications. Other applications will be considered at the time of this meeting of the Committee. The Director of Agriculture, Madras, has suggested that the time has come when the Committee might well reconsider the whole scheme and the qualifications for the post hitherto laid down in view of the great difficulty experienced in obtaining the services of a suitable man.

Central Provinces.—The Central Provinces Research Scheme has made good progress during the year and 460,000 lbs. of seed of Dr. Youngman's wilt resistant, high yielding improved Verum cotton were distributed for the present sowing season. This should ensure some 35,000 acres of the improved variety in the coming season. This cotton fetched Rs. 67 on Broach at Nagpur. The investigations into boll shedding and the study of the inheritance of the "neglectum" cottons made further advance during the year. *The Central Provinces Wilt Research Scheme* closed down on 31st March 1929 and a final report on the work carried out has been submitted by the Mycologist to Government.

United Provinces.—The results of the work done during the cotton season 1928 under the *United Provinces Entomological Research Scheme* definitely confirm the improvement both in yield and quality of the cotton crop if protection from the Pink Boll-worm can be ensured. Most interesting data on the treatment of cotton seed by sun drying in comparison with treatment in drier machines have been obtained and, in the present year, some important large scale experiments are contemplated which should throw considerable light on the effectiveness and practicability of control measures devised by the Cotton Entomologist against the pest. The scheme will continue till May 1930.

Indore Institute of Plant Industry.—The work at the Indore Institute of Plant Industry continues to develop and Mr. Howard has submitted a complete published account of the progress of the Institute since its inception. Several members of the Standing Finance Sub-Committee visited the Institute in June 1929 and a copy of their inspection note is attached to Mr. Howard's progress report. The annual grant of the Committee is sanctioned up to March 1930 and the Director has submitted proposals for an extension of the grant for a further period of five years. The next meeting of the full Committee will be held at Indore when members will have an opportunity of seeing the work in progress at the Institute and the results already achieved.

The Hyderabad Botanical Research Scheme has just commenced and a programme of work for the current year has been submitted by the Cotton Botanist.

APPENDIX VII.

SUBJECT 18.—*Agricultural Research.*

Report of Agricultural Research Sub-Committee on :—

II (*a*) Detailed examination of the position of the *Committee with regard to Agricultural Research.*

(*b*) Investigation into the improvement or deterioration of Indian stapled cotton during the past five years ; and

III Agricultural Research Schemes — Progress Reports and Programmes of work.

(1) Arising out of the enquiries instituted by Mr. Coleridge, the Sub-Committee considered the brief reports submitted by officers in charge of the Committee's agricultural research schemes on the progress made under each scheme since its inception and on the prospects of results being obtained which would be of practical value to the cotton growers and to the cotton trade. In addition, the reports submitted by trade associations, mills, cotton firms, etc., giving their opinions as to the improvement or deterioration of certain styles of Indian stapled cottons during the past five years were also considered.

(2) The usual progress reports and programmes of work of each agricultural research scheme, financed by the Committee, submitted at the July meeting each year were also considered and it was agreed that, in view of the fact that each of the Committee's agricultural research schemes would be subjected to a detailed consideration in connection with the general examination of the Committee's agricultural research policy, the Sub-Committee should amalgamate their report on this subject and on the progress and programmes of work in a single report for submission to the Central Cotton Committee.

(3) Mr. Coleridge explained the reasons which influenced him in instituting the inquiry into (*a*) the agricultural research policy of the Committee and the individual schemes in progress thereunder and (*b*) the opinion of the cotton trade on the improvement or deterioration of certain Indian stapled cottons during the past five years. As an outcome of these enquiries he felt that evidence was forthcoming that the agricultural research schemes of the Committee were generally on sound lines and promised valuable results but, on the other hand, there had been, during the past five years, undoubted deterioration of varying degrees of intensity, in the great majority of the Indian stapled cottons which were handled by the trade. This deterioration was due largely to the continuanee of various malpractices and abuses practised up-country, although seed deterioration and bad cultivation were contributing causes.

Mr. Coleridge stated that he proposed to submit three resolutions to the full Committee, the adoption of which would, in his opinion, enable the Central Cotton Committee to take definite action to check this deterioration of Indian cotton and, in addition, he requested the Sub-Committee to review the progress of the various research schemes financed by the Committee and to consider whether the progress so far made and the prospects of practical results in view justified their retention on the Committee's agricultural research programme.

(4) Mr. Coleridge's first resolution suggested the formation of a " Malpractices Sub-Committee " of the Indian Central Cotton Committee to consider all references to such malpractices and abuses as were adversely affecting Indian cottons. This Sub-Committee should be specially empowered to consider legislative measures towards the licensing of cotton gins and presses in India.

The Sub-Committee agreed that the formation of such a Sub-Committee of the Indian Central Cotton Committee would be a desirable step and should be carried into effect. It was felt, however, by certain members of the Sub-Committee that legislation towards the licensing of gins and presses would prove ineffective in checking malpractices and that there still remained other methods of dealing with abuses which should receive additional prior consideration before legislation could be advocated.

(5) Mr. Coleridge's second resolution was, in effect, that the Central Cotton Committee should, by the provision of staff or funds, assist in the wider distribution to the cultivators of the seed of improved varieties of Cotton.

The Sub-Committee agreed that such action on the part of the Committee would be helpful to the cotton-grower and would be welcomed by Local Governments. Some doubt was expressed as to the means whereby the Committee could best render assistance in this direction but it was decided that schemes and proposals should be called for from Local Governments and Directors of Agriculture.

(6) Mr. Coleridge's third resolution suggested that the Central Cotton Committee should be prepared to follow up any successful results obtained from research schemes financed by it by the initiation of measures of propaganda and demonstration designed to broadcast such results among the cultivators and to assist in their incorporation in the general agricultural practice of the tracts concerned.

The Sub-Committee agreed that such action on the part of the Committee, although it would require to be most carefully considered and deliberated upon in each individual case, was most desirable and that the future policy of the Committee could be broadened with advantage in order to permit of such work being undertaken whenever conditions arose which afforded a suitable opportunity for the Committee initiating activities in this direction.

(7) The Sub-Committee considered the brief general reports and the annual progress reports and programmes of work submitted on the various agricultural research schemes financed by the Central Cotton Committee.

(8) *The Sub-Committee* recommend that the following agricultural research scheme be closed down forthwith :—

" Dharwar Cotton Breeding Scheme on Upland American Type."

It was felt that no advantage could be gained by the continuance of this scheme on its present lines and any selections made which show promise should be handed over to the Cotton Breeder, Dharwar, for further test by him.

(9) *The Sub-Committee* recommend that the following agricultural research schemes be continued for the period at present sanctioned by the Committee when the position in regard to each of them will be reconsidered :—

BOMBAY PRESIDENCY.

Dharwar Cotton Wilt Research Scheme.
Khandesh Cotton Breeding Research Scheme.
Surat Physiological Research Scheme.
Surat Entomological (Earias Boll-worm) Research Scheme.
Sind Physiological Research Scheme.

Dr. Burns explained the progress made under each of the above schemes—with the exception of the Sind Physiological Research Scheme which was dealt with by Mr. Thadani—and it was agreed that the results so far achieved justified their continuance.

A suggestion was made that the Sind Physiological Research Scheme should be merged in the Punjab Botanical Research Scheme under which similar investigations were in progress. This suggestion was, however, negatived by the Sub-Committee who considered that the differing conditions of soil, climate, etc., in Sind—and the importance of research on cotton-growing in the area to be commanded by the Sukkur Barrage Irrigation works, fully justified the continuance of the investigations in progress in Sind.

PUNJAB.

Punjab Botanical Research Scheme.

Punjab Entomological Research Scheme.

The work in progress under each of these schemes was described by Mr. Trought and Mr. Milne.

It was suggested that the Punjab Botanical Research Scheme, in its present form, should be discontinued and that the Committee should finance a Cotton Research Institute in the Punjab to deal with all problems affecting the cotton crop of that province. This suggestion was not accepted by the Sub-Committee.

The Sub-Committee, by a majority, recommend that the proposals of the Director of Agriculture, Punjab, that the Punjab Botanical Research Scheme be extended for a further period of five years from 1st April 1930 to 31st March 1935, be sanctioned. The Sub-Committee further recommend that the following budget provision for the period of extension be approved :—

	Rs.
1930-31	58,550
1931-32	58,180
1932-33	59,790
1933-34	61,400
1934-35	63,010

CENTRAL PROVINCES.

Central Provinces and Berar Botanical Scheme.

MADRAS.

Madras Botanical (Herbaceum) Research Scheme.

The Cotton Specialist, Coimbatore, explained that he had obtained valuable material from the local Herbaceum crop which he proposed to utilise for crossing with long-stapled varieties of cotton with the object of obtaining a high-yielding cotton suitable for spinning 30's counts.

UNITED PROVINCES.

United Provinces Entomological Research Scheme.

INSTITUTE OF PLANT INDUSTRY, INDORE.

The Sub-Committee recommend that consideration of the Director, Institute of Plant Industry, Indore's application for renewal of the Committee's grant to the Institute for a further period of five years from 1st April 1930 be deferred until the next meeting of the Committee in December 1929, which meeting is to be held at Indore.

The progress reports and programmes of work of the above-noted schemes were approved.

(10) *General.*

(*a*) *Madras Pempheres and Physiological Scheme.*

This scheme has been hanging fire for three years owing to the difficulty of getting a suitable Physiological Botanist to take charge. The Selection Sub-Committee are meeting during the present week to consider two further applications for the post.

The Sub-Committee agreed with the Director of Agriculture, Madras, that some final decision with regard to this scheme must now be arrived at and that the Selection Sub-Committee should submit proposals for the modification of the Scheme or for its abandonment in the event of their failing to secure a suitable applicant for the post under consideration.

(*b*) *Bombay—Co-ordination of Cotton Research.*

The Sub-Committee considered the Secretary's note on the present position with regard to this scheme. It was decided that no further action was necessary pending the receipt of replies to the advertisement of the post which had been inserted in the leading newspapers of India and also in suitable newspapers in England.

The Sub-Committee negatived a resolution that the present advertisement should be withdrawn and the post re-advertised on a scale of Rs. 2,000—100—2,500.

(c) *Hyderabad Botanical Research Scheme.*

The Sub-Committee approved of the detailed budget for the year 1929-30 submitted by the Cotton Botanist, Hyderabad State, for Rs. 20,609-2-9 with the exception of two items of Rs. 700 and Rs. 500 under "office equipment," *i.e.*, Rs. 19,409-2-9 in all. The Sub-Committee consider that these two items, being of the nature of capital expenditure should be borne by the Hyderabad Government in accordance with the arrangement made at the time the proposals for the grant were submitted to the Committee.

The programme of work under the Hyderabad Botanical Research Scheme for 1929-30 was approved.

APPENDIX VIII.

SUBJECT 18.—*Agricultural Research.*

IV Report of Agricultural Research Sub-Committee on new grants.

AJMER-MERWARA.

The Sub-Committee considered an application from the Chief Commissioner, Ajmer-Merwara asking the Committee for a recurring grant of Rs. 5,500 per year for five years for work on cotton in that district.

This application had previously been circulated to all members of the Agricultural Research Sub-Committee for opinion and the replies received were also considered.

The Sub-Committee recommend that, in view of the fact that no provision is made for adequate supervision of the work proposed, the application, in its present form, should not be granted.

UNITED PROVINCES.

The Sub-Committee agreed that, in the absence of the Director of Agriculture, United Provinces, discussion of the proposals for a United Provinces Botanical Research Scheme should be deferred until the next meeting of the Committee in December 1929. It was also agreed that, in view of the proposed visit of a deputation from the Indian Central Cotton Committee to Muttra in October 1929 to discuss details of the scheme on the spot with the Director of Agriculture, United Provinces, it would be advisable to postpone consideration of the proposals until the report of the deputation was available.

APPENDIX IX.

SUBJECT 18.—*Agricultural Research.*

V Report of Agricultural Research Sub-Committee on Research Scholarship Scheme of the Indian Central Cotton Committee.

The Sub-Committee considered the replies received from various members of the Indian Central Cotton Committee in reply to a circular letter requesting their views on the future of the Research Scholarship Scheme of the Indian Central Cotton Committee.

A resolution was proposed and seconded to the effect that the Committee's research scholarship scheme should be discontinued but the resolution, on being put to the meeting, was rejected.

Some discussion took place on the number of years for which research scholarships should be granted by the Committee in future and on the value of the Committee's scholarships. The question of the future employment of research scholars was also considered.

The opinions expressed were so diverse that the *Sub-Committee* agreed that the subject should be referred to a Special Sub-Committee to be appointed at the next meeting of the Committee who should make a thorough investigation of the issues involved and submit a report to the full Committee at that meeting.

APPENDIX X.

SUBJECT 18—*Agricultural Research.*

VI Report of Agricultural Research Sub-Committee on Research Scholars.

Final reports on the work of Messrs. Varma, Shama Iyengar, Sharga, Mathur, Rane, Thakur and Iyengar were considered and recorded.

Progress reports on Messrs. Gidwani, Piare Mohan, Kanti Raj, and Nanjundayya were similarly considered and recorded together with the programmes of work of Mr. Kidar Nath Trehan and Mr. Sri Nagabhushana.

2. *The Sub-Committee* recorded the Secretary's notes on (*a*) the award of a senior research scholarship to Mr. Kidar Nath Trehan for work on cotton " White Fly " in the Punjab, (*b*) the resignation of scholarship by Mr. R. L. Chopra, (*c*) the extensions of research scholarships granted since the last meeting of the Committee.

3. *The Sub-Committee* considered the Director of Agriculture's proposal that he be permitted to award the two junior research scholarships in Cotton Marketing and Economics, sanctioned at the last meeting of the Committee, to two agricultural graduates of the Lyallpur Agricultural College to be selected by him. The Director of Agriculture proposed that the values of these scholarships should be Rs. 100 per mensem in the first year, Rs. 110 per mensem in the second year and Rs. 120 per mensem in the third year, and he informed the Sub-Committee that he had arranged with the Punjab University to give these scholars the necessary facilities for training. The Director of Agriculture also stated that the Punjab Government had agreed to appoint the graduates selected for these scholarships to posts in the Agricultural Department of the Punjab and to maintain their lien on these posts and to pay leave and pension contributions for them during their scholarship period.

The Sub-Committee recommend that the Director of Agriculture's proposals be accepted.

APPENDIX XI.

SUBJECT 21.—*Report of Standing Finance Sub-Committee.*

1. The Standing Finance Sub-Committee have held six meetings since the meeting of the Committee in December. Mr. Ralli replaced Mr. Fotiadi on the Sub-Committee and when Mr. W. Ellis Jones proceeded out of India from March 23rd to July 12th, 1929, the Sub-Committee decided to treat his absence as a casual vacancy and appointed Sir S. B. Mehta, Kt., C.I.E., in his place in accordance with the Rules under Section 16 of the Cotton Cess Act. Seth Kasturbhai Lalbhai proceeded out of India from May 11th to August 15th 1929. The Sub-Committee decided to keep his vacancy unfilled.

2. We submit a Balance Sheet as at March 31st 1929. This statement shows the income and expenditure under the budget heads sanctioned by the Government of India from the beginning of the cotton cess in 1923, *i.e.*, for six years and is prepared from the audited accounts. A similar Balance Sheet of the Committee's Provident Fund account is also attached.

3. A statement of Final Accounts for 1928-29, as certified by the Committee's auditors is attached. This has been published in the *Gazette of India* as required by Rule 13 (4) of the Cotton Cess Rules. Cotton cess receipts amounted to Rs. 6,44,180 as against an estimate of Rs. 6 lakhs. Interest on investments produced Rs. 1,34,409-10-1 as against an estimate of Rs. 1,40,000, the decrease being due to the transfer of 3½ per cent. G. P. Notes to the Trustees of the Committee's Provident Fund at the time of the separation of the Fund accounts from those of the Committee and to interest on new investments which becomes due in the next financial year. The total expenditure, including Special Reserve comes to Rs. 7,16,946-7-3 against an estimate of Rs. 8,07,742-11-0. The decrease is due to savings under various heads, notably Administration, Madras Pempheres and Physiological Scheme and Improvement of Cotton Marketing.

The Committee's closing balance, excluding Provident Fund, stood at Rs. 26,80,971-7-8 against Rs. 25,50,609-13-9 as taken in the revised estimates in December last. A separate statement of the Final Accounts—1928-29—of the Committee's Provident Fund is also attached.

4. We submit revised estimates for the current year showing the correct opening balance and the re-allotment to the various heads of the estimated savings carried over in the special reserve.

As regards cotton cess receipts, no change has been made in the estimate of Rs. 6,50,000 made in December 1928.

Owing to the conversion of 5 per cent. 1935 Taxable loan into 6 per cent. Corporation Bonds, it is probable that a small increase in the estimated income from interest, Rs. 1,35,000 will accrue. However the original figure has been allowed to stand for the present as the possible increase will depend upon further investments from surplus cotton cess receipts and additional conversions of Government paper to long-dated Bonds during the remaining months of the year.

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The following revisions under major heads of expenditure are proposed :—

		Original sanctioned budget.	Revision approved by S. F. S. C.
		Rs.	Rs.
II-B.	Technological Research—Provincial ..	5,000	6,850
V	Madras Herbaceum	12,985	7,945
VII	Central Provinces	41,689	40,696
VI-B.	Punjab (Entomological)	17,000	19,220
		76,674	74,711

The extra provision under II-B above is required on account of the creation of a third post of Technological Assistant for the Punjab. The extra expenditure proposed for the Punjab Entomological Scheme will be met from the savings of last year for re-allotment.

As the savings resulting from the non-payment of the grant under the Madras Pempheres and Physiological Scheme and from the Madras Herbaceum and Central Provinces were not required as reserve for re-allotment, these have been allowed to be resumed in the Committee's closing balance of the year 1928-29. This has reduced the total figure of expenditure, including reserve for special re-allotment, from Rs. 9,37,015-10-0, the previous estimate, to Rs. 8,78,110 as shown in the revised statement.

5. As required by the Cotton Cess Rules, we submit for formal sanction the Budget for the pay of Government officers and other permanent Government servants employed by the Committee.

6. We have approved of a suggestion put forward by the Government of India that the whole-time Expert Adviser in agricultural matters to the Council of Agricultural Research should be an ex-officio member of the Indian Central Cotton Committee in future. The Government of India will make the necessary amendment in the Cotton Cess Act.

7. We have recommended to the Government of India that Messrs. S. B. Billimoria & Co. should be re-appointed auditors for 1929-30. The auditors' fees have to be fixed by resolution of the Committee and we recommend that Rs. 1,000, as fixed at the 18th meeting of the Committee in July 1928, be sanctioned.

8. The Sub-Committee have passed a resolution as under :—

"That the President, *Vice*-President and Secretary of the Indian Central Cotton Committee, Sir Purshotamdas Thakurdas *and the members of the Standing Finance Sub-Committee* should form a panel from which three should represent the Committee at meetings of the Governing Body of the Institute of Plant Industry, Indore."

The Sub-Committee felt that, in view of the large share of the income of the Institute of Plant Industry contributed by the Committee it was essential that the Committee should always be fully represented at meetings of the Board of Governors and that it was necessary to extend the panel from which the Committee's representatives are chosen to include all members of the Standing Finance Sub-Committee. The resolution will be put before the full Committee for confirmation.

9. Mr. J. H. Ritchie proceeded on 8 months' leave on 14th March 1929 and Mr. W. J. Jenkins took over the Secretaryship from that date.

10. We have considered a proposal from the Government of India that, instead of drawing house rent allowances of Rs. 250 per mensem, the Secretary and Deputy Secretary of the Committee should, in future, be permitted to draw allowances on the scale of officers of the Central Government stationed in Bombay sanctioned under Finance Department Resolution No. 5067 C. S. R., *i.e.*, an allowance equivalent to the amount by which the rent paid exceeds 10 per cent. of pay subject to a limit of 15 per cent. of pay. We unanimously decided that the present system of a fixed house allowance of Rs. 250 per mensem should be continued as more economic to the Committee and more suitable to the conditions of service of these officers under the Committee.

The Sub-Committee approved a proposal that the Committee should start a Securities Sinking Fund to provide for the amount required against the redemption of the Committee's holdings in Municipal and Corporation Bonds on maturity at par. The necessary action will be taken in consultation with the Committee's auditors.

The Sub-Committee considered and approved a proposal submitted by Mr. C. R. Palairet, Indore, that, in future, the Committee should not limit their expenditure to pure agricultural or technological research but should devote some energy and funds to extension, demonstration and propaganda work with the object of establishing the results of their successful research schemes in the general agricultural practice of the cotton-growing tracts. The Sub-Committee consider that such a development is a necessary supplement to the Committee's agricultural research programme and that carefully considered schemes for extension, demonstration and propaganda work would be a legitimate charge on the Committee's funds.

On your behalf, the Sub-Committee forwarded a resolution of condolence on the death of Mr. B. F. Madon, a prominent member of the Committee for three years, to his widow and to Messrs. R. D. Tata and Co. of which firm the late Mr. Madon was a Director.

Balance Sheet as on 31st March 1929.

Receipts.	Rs. a. p.	Rs. a. p.
Cotton cess receipts		59,55,086 5 9
Interest account—		
Amount received on investments and Fixed Deposits	5,77,935 7 6	
Refunds of income-tax deducted on interest..	9,277 11 0	
	5,87,213 2 6	
Less—		
Interest paid in advance at the time of purchasing Government Paper—since recovered and Bank's commission on interest collection	25,343 7 11	
Income-tax deducted on interest on Government Paper	9,698 0 0	
Interest credited to Provident Fund Account..	4,886 6 2	
Bank's withdrawal charges for tax free loan sold	1,507 8 0	
		5,45,777 12 5
Profit on conversion 6 per cent. 1926 Bonds to 5 per cent. 1935 Taxables		5,000 0 0
Miscellaneous receipts		7,176 10 1
Total ..		65,13,040 12 3
Suspense receipts .. .. .. (Amount payable to the Trustees to the Indian Central Cotton Committee Provident Fund for Committee's contributions and interest as on 31st March 1929).		11,927 6 11
Total ..		65,24,968 3 2

Expenditure.	Rs. a. p.	Rs. a. p.
I. Administration		8,03,364 6 5
(*b*) Improvement of Cotton Marketing..		62,567 2 0
II. *Technological Research—*		
(*a*) Technological Laboratory—		
Capital Expenditure—		
(1) Lands and Buildings	3,55,797 9 11	
(2) Machinery	78,385 0 3	
(3) Freight	7,502 2 8	
(4) Apparatus and Equipment ..	41,558 3 7	
(5) Machinery Workshop	5,789 8 3	
(*b*) Technological Laboratory—Working Expenses	6,04,002 11 6	
(*c*) Provincial	3,588 9 0	
		10,96,623 13 2
III. Research Studentships		1,55,143 9 3
Agricultural Research Grants.		
IV. Bombay	3,46,706 6 6	
V. Madras Herbaceum	60,485 8 0	
Madras Pempheres and Physiological ..	1,087 5 0	
VI. Punjab Botanical	1,97,840 4 2	
Punjab Entomological	49,034 0 0	
VII. Central Provinces	1,48,386 11 7	
VIII. United Provinces	1,08,317 1 0	
IX. Institute of Plant Industry, Indore ..	7,14,676 12 0	
X. Sind	37,869 2 3	
XI. Burma	2,906 15 5	
		16,67,310 1 11
Suspense account		2,600 4 7
Investments and cash balances		27,37,358 13 1
Total ..		65,24,968 3 2

Balance Sheet.

Provident Fund Account as on 31st March 1929.

Receipts.						Expenditure.			
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Subscribers' contributions	36,787	6	11						
Committee's contributions	36,004	6	3						
Recoveries against advances ..	2,421	4	0						
	75,213	1	7						
Less—									
Refunds to subscribers resigned ..	2,655	0	4						
Advances ..	2,805	0	0						
	5,460	0	4						
				69,753	1	3			
							Expenditure for stationery transfer fees, cost of stamps and registration charges for the P/A. given to the Imperial Bank by the Trustees ..	108	5	0
							Accrued interest paid to subscribers' account ..	737	10	0
							Cost of 3½ per cent. G. P. Notes of Rs. 73,200 ..	51,730	7	1
							Cost of 6 per cent. 1930 tax free loan of Rs. 4,000 ..	4,061	4	0
							Balance in current account ..	1,188	0	3
							Due from the Indian Central Cotton Committee on account of Committee's contributions and interest as on 31st March 1929 ..	11,927	6	11
Grand total ..				69,753	1	3	Grand total ..	69,753	1	3

Statement of Receipts and Payments for the year ended 31st March 1929.

	Rs.	a.	p.
Opening Balance ..	26,16,752	8	9
Receipts under Section 12 of the Indian Cotton Cess Act, 1923	6,44,180	3	10
*Other Receipts ..	14,502	15	2
Interest on Investments ..	1,34,409	10	1

		Rs.	a.	p.	Rs.	a.	p.
I.	*Administration of the Committee* (including Improvement of cotton marketing) ..	1,46,044	15	1			
	Less—Refunds from Directors of Agriculture, Bombay and Punjab on account of unexpended balances of Cotton Finance Inquiry Grants made during the previous years, and from East India Cotton Association for type bales supplied to them	2,186	5	4			
					1,43,858	9	9
II.	Agricultural Research Grants-in-Aid				3,85,924	8	5
III.	Technological Research				1,40,103	2	0
IV.	Closing Balance. (Government Paper at cost).						
		Rs.					
	3½% Govt. P. Notes of the Face Value.	11,56,300			8,17,180	12	11
	5% Taxable Loan 1935 ,, ,, ..	7,00,000			6,63,556	4	0
	5% ,, ,, 1929-47 ,, ,, ..	7,88,000			7,65,220	12	10
	4½% Indian Sterling stock ,, ,, ..	£ 24,000			2,89,384	10	10
	6% Ten Year Bonds 1930 ,, ,, ..	15,000			15,225	0	0
	4½% Govt. of India Loan 1955-60 ,, ..	26,600			25,004	0	0
	*6% Bom. Mun. Debentures Face Value.	50,000			56,500	0	0
	Fixed and Call deposits (with Approved Banks)	....			83,000	0	0
	Imperial Bank of India, Ltd. Current Account	....			19,787	4	6
	Imprest—Committee's Account (Certified by the Secretary) ..	....			1,500	0	0
	Imprest—Technological Laboratory (Certified by the D. T. L.)	....			500	0	0

	Imprest—Cotton Research Botanist, Punjab (Certified by the Cotton Research Botanist, Punjab)	500	0	0	
	Suspense (recoverable)	2,600	4	7	
	†Total Closing Balance ..				27,39,959 1 8
Rs. 34,09,845 5 10					34,09,845 5 10

* Includes Rs. 11,027-6-11 on account of Committee's Contribution and Interest on the Provident Fund Account as on 30th March 1929.

* Deposited with Imperial Bank of India for securing against any overdraft that may be required by the Committee.

† This amount includes Rs. 11,927-6-11 on account of Provident Fund Account.

We have examined the above Statement of Receipts and Expenditure of the Indian Central Cotton Committee with the Books, Vouchers and certified returns of the Committee, have obtained all the information and explanations we have required and certify that to the best of our information and explanations received, the above Statement is a correct abstract of the figures appearing in the books and is drawn up in conformity with the Rules under the Indian Cotton Cess Act, 1923.

(Signed) S. B. BILLIMORIA & Co.,
Auditors.

Bombay, Dated 10th May 1929.

Provident Fund Account as on 31st March 1929.

Receipts.	Rs.	a.	p.	Rs.	a.	p.	Expenditure and Investments.	Rs.	a.	p.
To Opening Balance as on 1st April 1929 ..	....			47,049	8	2	By expenditure for stationery, transfer fees, cost of stamps and Registration charges for the Power of Attorney granted by the Trustees to the Imperial Bank of India and commission on interest collected by the Bank ..	108	5	0
To Subscribers' contributions	10,165	7	0				By investment in 3½ per cent. G. P. Notes of the face value of Rs. 73,200	51,730	7	1
Less—Refund to subscribers	14	9	0				By investment in 6 per cent. 1930 Tax Free Bonds of the face value of Rs. 4,000 ..	4,061	4	0
Add—Recoveries against advances	*10,150	14	0				By Balance in current account	1,188	0	3
	671	4	0				By Amount due from the Indian Central Cotton Committee for the Committee's contributions as on 31st March 1929 and interest on subscribers' and Committee's contributions.	11,927	6	11
	10,822	2	0							
Less—Advances to subscribers	805	0	0	10,017	2	0				
Interest received from subscribers	5	3	6							
Interest received on investments	120	0	0							
Interest receivable from the Indian Central Cotton Committee on subscribers' contributions ..	919	5	11							
Interest receivable from the Indian Central Cotton Committee on Committee's contributions ..	857	3	0							
	1,901	12	5							
Less—Advance interest paid for the Government Paper purchased (since recovered) ..	103	13	4							
Committee's contributions due from the Indian Central Cotton Committee at 100 per cent. ..				1,797	15	1				
				*10,150	14	0				
Grand Total ..				69,015	7	3	Grand Total ..	69,015	7	3

Examined and found correct.

(Signed) S. B. BILLIMORIA & Co.,
Auditors.

28th May 1929.

STATEMENT

Receipts.

	Rs.	a.	p.	Rs.	a.	p.
To Opening Balance ..	25,66,756	13	4			
Special Reserve ..	49,995	11	5			
				26,16,752	8	9
Cotton Cess Receipts ..				6,44,180	3	10
Interest account ..				1,34,409	10	1
Miscel. Income ..				2,575	8	3

Expenditure.

	Budget as sanctioned in July 1928.			Actual expenditure.			Savings. To be resumed into closing balance.			Savings. Amount for re-allotment for special reserve.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
I. (A) Administration ...	1,75,000	0	0	1,38,742	2	1	36,257	13	11	....		
(B) Improvement of Cotton Marketing ..	20,000	0	0	5,116	7	8	14,883	8	4	....		
II. *Technological Research.*												
A. *Technological Laboratory*												
(*i*) Capital Expenditure	15,766	11	0	....			....			15,766	11	0
(*ii*) Working Expenses ..	1,46,599	1	0	1,36,514	9	0	10,084	8	0	....		
(*iii*) Boll Weevil Experiments	359	14	0	....			359	14	0	....		
B. Provincial Research ..	4,500	0	0	3,588	9	0	911	7	0	....		
III. *Research Studentships. Agricultural Research Grants.*	40,000	0	0	30,540	12	6	9,459	3	6	....		
IV. *Bombay Schemes.*												
(*a*) Surat Physiological	29,029	6	0	27,870	0	0	....			1,159	6	0
(*b*) ,, Boll-worm ..	22,217	0	0	14,298	7	0	....			7,918	9	0
(*c*) Dharwar Wilt and Cotton Breeding ..	28,159	9	0	25,069	9	5	....			3,089	15	7
(*d*) Khandesh Cotton Breeding ..	5,112	11	0	4,370	8	0	....			742	3	0
V. *Madras* (*a*) Herbaceum	14,352	10	0	8,858	2	0	5,494	8	0	....		
(*b*) Pempheres and Physiological ..	55,000	0	0	304	12	0	54,695	4	0	....		

	VI. *Punjab* (*a*) Botanical Working Expenses ..	56,824	14	0	51,676	2	3	....		5,148	11	9
	Punjab (*b*) Entomological Working Expenses.	18,866	0	0	15,300	0	0	....		3,566	0	0
	VII. Central Provinces.	38,241	14	0	32,631	13	0	5,610	1 0	....		
	VIII. *United Provinces.*											
	(*a*) Capital Expenditure	9,477	4	0	3,500	0	0	....		5,977	4	0
	(*b*) Working Expenses.	17,000	0	0	17,000	0	0	....		....		
	(*c*) Pay and Allowances of Asstt. Entomologist	6,025	13	0	4,465	4	0	....		1,560	9	0
	IX. Institute of Plant Industry, Indore ..	1,30,000	0	0	1,30,000	0	0	....		....		
	X. Sind	22,170	0	0	20,039	2	3	....		2,130	13	9
	Total ..	8,54,702	11	0	6,69,886	4	2	1,37,756	3 9	47,060	3	1
	XII. Reserve for re-allotment				47,060	3	1					
					7,16,946	7	3					
	By Closing Balance				26,80,971	7	8					
Grand Total ..	33,97,917	14	11	Grand Total ..	33,97,917	14	11					

FINAL ACCOUNTS, 1928-29.

Provident Fund Account.

	Rs.	a.	p.		Rs.	a.	p.
To Opening Balance ..	*47,049	8	2	By Balance ..	68,907	2	3
Subscribers' Contributions ..	10,150	14	0				
Committee's Contributions ..	10,150	14	0				
Net interest less expenditure.	1,689	10	1				
Recoveries against advances.	671	4	0				
Total ..	69,712	2	3				
Less—Advances made ..	805	0	0				
	68,907	2	3		68,907	2	3

*Closing balance 1927-28, audited accounts.

REVISED ESTIMATES—1929-30

Revised Estimates—1929-30.

As passed by the Indian Central Cotton Committee on July 17th, 1929.

Receipts.

	Rs.	a.	p.	Rs.	a.	p.
To opening Balance ..	26,80,971	7	8			
To Special Reserve for re-allotment ..	47,060	3	1	* 27,28,031	10	9
Cotton Cess Receipts ..	....			6,50,000	0	0
Interest account ..	....			1,35,000	0	0
Other receipts ..	....			1,000	0	0

Expenditure.

	Rs.	a.	p.	Special Reserve for re-allotment. Rs.	a.	p.
I. (A) Administration	1,71,000	0	0	....		
(B) Improvement of Cotton Marketing	5,000	0	0	....		
II. *Technological Research.*						
(A) Technological Laboratory—						
(*i*) Capital Expenditure ..	....			15,766	11	0
(*ii*) Working Expenses ..	1,59,348	0	0	....		
(B) Provincial.						
III. Research Studentships ..	6,850	0	0	....		
Agricultural Research Grants.	40,000	0	0	....		
IV. Bombay Schemes—						
(*a*) Surat Physiological ..	31,830	0	0	1,159	6	0
(*b*) Surat Boll-worm	18,050	0	0	7,918	9	0
(*c*) Dharwar Wilt and Cotton Breeding.	25,840	0	0	3,089	15	7
(*d*) Khandesh Cotton Breeding ..	5,000	0	0	742	3	0
(*e*) Co-ordination of Cotton Research	19,731	0	0	....		
V. Madras : (*a*) Herbaceum ..	7,945	0	0	....		
(*b*) Pempheres and Physiological ..	55,000	0	0	....		
VI. Punjab : (A) Botanical Scheme—						
(*i*) Capital Expenditure ..	....			....		
(*ii*) Working Expenses ..	55,000	0	0	5,148	11	9
(B) Entomological Scheme	19,220	0	0	3,566	0	0†
VII. Central Provinces	40,696	0	0	....		
VIII. United Provinces—						
(*a*) Capital Expenditure ..	....			5,977	4	0
(*b*) Working Expenses ..	6,000	0	0	....		
(*c*) Recurring grant for staff ..	5,040	0	0	1,560	9	0

			IX. Institute of Plant Industry, Indore			1,15,000	0	0	....	
			X. Sind			20,000	0	0	2,130	13 9
			XI. Burma			....			....	
			XII. Hyderabad			24,500	0	0	....	
			XIII. Re-allotment of savings—Heads II to XI			47,060	3	1	47,060	3 1
					Total ..	8,78,110	3	1		
					By Balance ..	26,35,921	7	8		
Grand Total ..	35,14,031	10	9		Grand Total ..	35,14,031	10	9		

*Closing Balance of 1928-29 audited accounts.

‡ Includes Rs. 2,220 transferred with approval of the Standing Finance Sub-Committee for expenditure in current year in excess of the sanctioned Budget.

REVISED ESTIMATES, 1929-30.

Provident Fund Account.

	Rs.	a.	p.		Rs.	a.	p.
To Opening Balance as on the 1st April 1929.	68,907	2	3	By Balance ..	96,925	2	3
Subscribers' Contributions	12,064	0	0				
Committee's ,,	12,064	0	0				
Advance recoveries ..	50	0	0				
Interest receivable ..	3,840	0	0				
Total ..	96,925	2	3		96,925	2	3

Budget for 1930-31 for pay and allowances of Government servants lent to the Indian Central Cotton Committee, Bombay.

34. A—AGRICULTURE.

INDIAN CENTRAL COTTON COMMITTEE.

Budget Estimates for 1930-31.

No.	Minor and detailed heads.	Amount of provision.
	Non-voted.	Rs.
1	Salary—Secretary—Rs. 2,000—2,250—Overseas pay £13-6-8 ..	27,287
1	Salary—Deputy Secretary—Rs. 350—1,250—Overseas pay £30 and special pay Rs. 250	18,150
	Voted.	
	Pay of Establishment.	
5	Superintendent and Clerks (at rates varying from Rs. 70 to Rs. 750)	18,377
	Leave salary—Establishment	1,200
	Allowances, Honoraria, etc.	
	Non-voted.	
	House-rent and other allowances	8,400
	Travelling allowance of Officers	8,000
	Voted.	
	Travelling allowance of Establishment	1,000
	Non-voted.	
	Grants-in-aid, contributions, etc.	
	Contributions for passage of officers transferred to or from other Governments, Departments, etc.	1,200
	Total Non-voted ..	63,037
	Total Voted ..	20,577
	Grand Total ..	83,614
	Deduct recoveries from the Committee	82,414
	Nett—Leave-salary—Establishment—paid by Government ..	1,200

Statement showing the details of the provision for Establishment of the Office of the Secretary, Indian Central Cotton Committee, for the year 1930-31.

	Details of appointments.	Sanctioned scale of pay.	Actual pay on 1st April 1930.	Amount of provision.	Remarks.
		Rs.	Rs.	Rs.	
1	Superintendent ..	450—20—550—25—750	600	7,175	
2	Statistical Assistant ..	300—20—500	440	5,260	
3	First Assistant ..	200—10—300	240	2,870	
4	Upper Division Clerk ..	110—5—150—10—230	150	1,900	Draws Rs. 160 from 1st May 1930.
5	General Clerk	70—4—130	98	1,172	
			Total ..	18,377	

APPENDIX XII.

SUBJECT 15—*Cotton Statistics.*

Cotton Forecasts.

Secretary's note.

At the 15th meeting of the Indian Central Cotton Committee (18th to 19th July 1927) a resolution was passed asking the Government of India to examine the question of improving the accuracy of the 5th Supplementary Cotton Memorandum issued in April so as to include in it revised estimates of cotton production from all the principal cotton-growing Provinces and States.

2. At the 17th meeting of the Indian Central Cotton Committee (30th to 31st July 1928) the replies received from the various Provinces and States to the Government of India's proposals in this connection were recorded, and it was felt that another step forward had been taken towards obtaining for the trade more reliable statistics of the cotton crop. Only the States of Central India and Rajputana remained to be asked to supply supplementary information about their cotton crop to the Director General of Commercial Intelligence and Statistics in April each year.

3. These States have now been approached through their representative on the Committee, Mr. A. Howard, C.I.E., and the following note on the subject was circulated amongst them :—

NOTE ON IMPROVEMENT OF GOVERNMENT COTTON FORECASTS.

At the 15th Meeting of the Indian Central Cotton Committee, 18th and 19th July 1927 the question of improving the Government cotton forecasts was discussed. It was stated that the revised figures, generally issued in the year following that to which they refer, were too late to be of any advantage to the cotton trade. On this account, it was urged that, in cases where there has been a *material change in the character of the cotton crop since the issue of the fourth forecast in February*, a corrected memorandum should be sent to the Director General of Commercial Intelligence and Statistics in Calcutta by the 15th of April each year so that any alterations reported can be incorporated in a fifth or final All-India Cotton Memorandum.

2. The Bombay Government and the Baroda, Hyderabad and Mysore Durbars have agreed to issue a fifth cotton forecast in April in order to give more accurate information regarding the late cottons grown in their areas.

3. It is not considered that a fifth forecast will be necessary in any other areas than those mentioned in paragraph (2) above, but the other cotton growing provinces of British India have agreed to send supplementary information—as indicated in paragraph 1—to the Director General of Commercial Intelligence and Statistics in Calcutta early in April when any change in the character or quantity of their cotton crop has occurred since the issue of the February forecast.

4. In order to improve the accuracy of the final All-India Cotton Memorandum issued by the Director General of Commercial Intelligence and Statistics, Calcutta, and to render the information contained therein of greater value to the cotton trade, it is most desirable that the Durbars of the States of Central India and Rajputana should also consider the advisability of communicating *any material change in their cotton crop since the issue of the February forecast* to the Director General of Commercial Intelligence and Statistics, Calcutta. Such supplementary information should be furnished by the 15th April annually in order that it can be made available for inclusion in the All-India Final Cotton Memorandum of the year."

4. The Director General of Commercial Intelligence and Statistics has reported that only two States, *viz.*, Jaora and Narsingarh in Central India, and two States, *viz.*, Jaipur and Tonk in Rajputana have supplied the desired information this year. Replies are awaited from others and, if the response from the major cotton-growing States is inadequate the matter will again be taken up with these States through the usual official channel.

APPENDIX XIII.

SUBJECT : 15—*Cotton Statistics.*

Comparison of press returns with cotton forecasts.

Secretary's Note.

The attached table compares the cotton pressed in each block until June 7th with the forecast figures for 1928-29.

In the Gujerat block, there is, as usual, an excess of cotton pressed over the estimated forecast. During the past two years, the cotton pressed in the Baroda, Navsari and Kadi districts fell below the forecasted crop and it was assumed that the shortage under these blocks accounted for the excess in Gujerat. This year, however, these three districts of Baroda State show an excess of 9,000 bales. In Gujerat, therefore, it would appear that the discrepancy may be largely due (*a*) to an under-estimation of the crop as a result of frost damage (*b*) to incorrectness of the area figures as pointed out by the Director of Agriculture, Bombay Presidency, in regard to last year's figures.

In the North Deccan Block the excess (21 per cent.) is much greater than last year (1·5 per cent.). In the East and West Deccan areas, pressing is still on hand and figures are, therefore, incomplete.

For the fourth year in succession, Sind shows a very high excess of cotton pressed over the estimated crop. In explaining the cause of this excess last year, the Director of Agriculture, Bombay Presidency, attributed it to the very large import of cotton from the Indian States lying to the North and from the Punjab. This year, so far as the Punjab is concerned, there is already a considerable excess there and this would be aggravated if, in addition, it is held that much cotton is exported to Sind. Cotton produced in the Khairpur and Bahawalpur States is estimated this year at 5,700 and 24,100 bales respectively. It is certain that all of this cotton would not go to Sind for pressing and the Rajputana States adjoining Sind are not large cotton producers. It would therefore seem that there are other reasons for the large recurring discrepancy as regards Sind which have not yet been discovered. It will be possible to get nearer to a solution when the recently re-introduced Rail-borne Trade Statistics enable imports to be checked.

In the Punjab, the excess shown this year appears to be almost equal to that of last year. Last year, the Director of Agriculture, Punjab, mentioned two possible causes of the discrepancy (*a*) the utilization of the 400 lb. bale instead of actual weight in the forecast figures and (*b*) imports from Indian States. However, even with figures in 400 lb. bales, the excess of the crop over the forecast is about 180,000 bales. It seems that until all the cotton-growing States of the Punjab tract come into line and furnish information for forecasts and compile press returns, an adequate check of the Punjab returns cannot be made as the quantities of cotton involved are considerable.

The United Provinces have consistently shown deficits which are explained as due to local consumption. In the Central Provinces, the excess discrepancy is larger than that found last year, the Nagpur block being again responsible for the major part. The Director of Land Records, who compiles forecasts, has requested all Cotton Market Committees to supply him with weekly returns of arrivals which may enable him to locate the sources of the errors in the estimates.

No comparison is possible in the Madras figures as the season is still in progress.

Many Indian States have now begun to compile press returns but for some of them production figures are not recorded separately. It is most desirable that steps should be taken to make these statistics as full as possible all over India.

Table showing the estimated crop in British India in 1928-29 *and the number of cotton bales pressed during the season* 1928-29 *upto the week ending 7th June* 1929.

Divisions as per press returns.	Estimated crop in bales in 1928-29.	Number of cotton bales pressed upto 7th June 1929.	Excess (+) deficit (−) of cotton pressed over estimated crop.	Per centage of column 4 to column 2.
BOMBAY.				
The Konkan and the Port of Bombay ..	..	*49,980	....	..
Gujerat	138,024	216,706	+78,682	57
North Deccan	284,357	345,276	+60,919	21
East Deccan	163,078	114,190	−49,488	30
West Deccan & S. M. C.	246,228	103,373	−142,855	58
Sind	108,521	182,143	+73,622	68
Total, Bombay Presidency ..	940,808	961,688	+20,880	2
Loose cotton received in mills in Presidency up to 30th April 1929	..	14,972	+14,972	..
Total ..	940,808	976,660	+35,852	4
PUNJAB.				
Ambalia	80,100	98,023	+17,923	22
Jullundor	32,900	37,068	+4,168	13
Lahore	124,200	179,386	+55,186	45
Rawalpindi	51,600	76,939	+25,339	49
Multan	190,900	278,048	+87,148	46
Feroxepur	41,300	60,989	+19,689	48
Total ..	521,000	730,453	+209,453	40
Loose cotton received in mills in the Punjab up to 30th April 1929	..	2,399	+2,399	..
Total ..	521,000	732,852	+211,852	41
UNITED PROVINCES.				
Upper Doab	114,768	95,228	−19,540	17
Middle Doab	94,098	74,456	−19,642	21
Lower Doab and Bundelkhand	18,440	27,045	+8,605	47
Rohilkhand	20,821	5,973	−14,848	71
Rest of the Province	4,024	..	−4,024	100
Total ..	252,151	202,702	−49,449	20
Loose cotton received in mills up to 30th April 1929	..	13,412	+13,412	..
Total ..	252,151	216,114	−36,037	14

* Mainly repressed cotton or waste excluded from the total.

Divisions as per Press Returns.	Estimated crop in bales 1928-29.	Number of cotton bales pressed up to 7th June 1929.	Excess (+) Deficit (−) of cotton pressed over estimated crop.	Percentage of column 4 to column 2.
CENTRAL PROVINCES.				
Jubbulpore	2,400	..	−2,400	100
Nerbudda	23,000	27,071	+4,071	18
Nimar	100,000	112,932	+12,932	13
Nagpur	220,000	310,631	+90,631	41
Satpura	35,000	19,319	−15,681	45
Chattisgarh	1,200	..	−1,200	100
Total ..	381,600	469,953	+88,353	23
Loose cotton received in C. P. mills up to 30th April 1929	..	5,951	+5,951	..
Total ..	381,600	475,904	+94,304	25
MADRAS.				
Tinnevellies	164,800	60,360*	−104,440	..
Salems	37,300	9,980	−27,320	..
Cambodia	157,900	53,010	−104,890	..
Northerns and Westerns	127,900	72,614	−55,286	..
Cocanadas and others	46,000	18,212	−27,788	..
Total ..	533,900	214,176	−319,724	..
Loose cotton received in mills upto 30th April 1929	..	24,605	+24,605	..
Total ..	533,900	238,781	−295,119	..
OTHERS.				
Berar (Berar)	946,000	992,880	+46,880	5
Bengal	17,825	21,274	+3,449	19
Burma	56,000	32,661	−23,339	42
North Western Provinces	4,000	1,084	−2,916	73
Ajmer-Merwara	21,000	44,826	+23,826	113
Delhi	1,000	..	....	..
Assam	17,000	..	....	..
Bihar and Orissa	14,341	..	....	..
Total, British India including loose cotton received in mills up to 30th April 1929 ..	3,706,625	3,733,036	+26,411	1

* Since 1st February 1929.

INDIAN STATES.

Divisions as per Press Returns.	Estimated crop in bales in 1928-29.	Number of cotton bales pressed up to 7th June 1929.	Excess (+) Deficit (—) of cotton pressed over estimated crop.	Percentage of column 4 to column 2.
Alipura	Not known	*	....	
Alwar	739	*	....	
Baroda :—				
Baroda	34,936	27,866	—7,070	20
Navsari	13,050	11,338	—1,712	13
Kadi	15,310	33,184	+17,874	117
Amreli	7,808	7,227	—581	7
Total Baroda State ..	71,104	79,615	+8,511	12
Barwani	Not known	14,452	....	..
Bhavnagar	Do. ..	* 51,911	....	..
Bhopal	65,000	* 8,447	....	..
Cambay	Not known	* 029	....	..
Chhota Udepur	Do. ..	* 2,604	....	..
Dharangadhra	Do. ..	7,017	....	..
Faridkot	Do. ..	* 10,976	....	..
Gondal	Do. ..	8,442	....	..
Holkar (Indore)	347,903	150,867	—197,036	57
Hyderabad (Nizam's)	895,134	* 387,311	....	..
Idar	Not known	* 1,618	....	..
Jaipur	10,576	4,227	—6,349	60
Jhalawar	4,212	17,204	+13,082	311
Jamkhandi	Not known	5,189	....	..
Jhabua	Do. ..	2,080	....	..
Jind	19,300	15,643	—3,657	19
Jodhpur	8,465	* 7,571	....	..
Limbdi	Not known	* 2,423	....	..
Mudhol	Do. ..	* 2,062	....	..
Nabha	19,800	* 31,582	....	..
Nawanagar	Not known	* 5,811	....	..
Porebander	Do. ..	....	....	..
Rajpipla .. .. Do.	Do. ..	* 15,063	....	..
Rutlam .. .. .. Do.	Do. ..	* 24,873	....	..
Savanur .. .. .. Do.	Do. ..	* 2,809	....	..
Tonk .. .. .. Do.	11,531	12,987	+1,456	13
Wadhwan .. .. Do.	Not known	7,853	....	..
Wankaner .. .. .. Do.	Do.	4,591	....	..

* Not up to date.

APPENDIX XIV.

SUBJECT 11.—*Mixing of Punjab-American cotton.*

Secretary's note.

1. At the 17th meeting of the Indian Central Cotton Committee (July 1928), a report of a Conference of the members of the Local Sub-Committee and representatives from the Punjab and Sind on measures to be taken to discourage the mixing of Punjab-American cotton was adopted.

The main decisions of the Conference were :—

(1) The Punjab Government should be asked to examine the question of mixing of *desi* and American cotton with a view to its prevention.

(2) The members of the Millowners' Associations in Bombay, Ahmedabad and Japan and of the International Federation should be requested to give encouragement to the production of pure American cotton by paying a full price for it when available.

(3) Every assistance should be given to the Director of Agriculture in regard to the establishment of a testing house issuing certificates without any financial liability devolving on the Indian Central Cotton Committee.

(4) It was desirable to fix the staple of Punjab-American cotton at ⅞" minimum and no cotton should be allowed to pass for deficiency in staple. The East India Cotton Association and the Karachi Joint Cotton Committee should be requested to embody a rule on these lines in their contracts.

2. The present position with regard to each of these decisions is as follows :—

The Government of the Punjab were addressed and requested to consider the suggestion (1) of the Conference, *i.e.*, to examine the question of mixing of *desi* and American cotton with a view to its prevention.

The following letter, enclosing a copy of a letter No. 28-S, dated 17th May 1929, from the Director of Agriculture, Punjab, has been received from the Punjab Government.

Copy of letter No. 552-D (S), dated 14th June 1929, from the Senior Secretary to the Financial Commissioners and Deputy Secretary to Government, Punjab, Development Department, to the Secretary, Indian Central Cotton Committee, Bombay :—

SUBJECT.—*Mixing of Punjab-American cotton.*

"With reference to your letter No. 7357, dated the 13th August 1928, to the address of the Secretary to Government, Punjab, Transferred Departments, I am directed to forward a copy of a letter No. 28-S, dated the 17th May 1929, which gives the views of the Director of Agriculture, Punjab, on the question of the mixing of Punjab American cotton.

2. The Honourable Minister for Agriculture is not prepared to take any action, except in the interest of the Agriculturist, and he feels that any interference on his part would only react on prices adversely."

Copy of letter No. 28-S, dated the 17th May 1929, from the Director of Agriculture, Punjab, to the Senior Secretary to Financial Commissioners, and Deputy Secretary to Government, Punjab, Development Department.

SUBJECT.—*Mixing of Punjab-American Cotton.*

"With reference to your endorsement No. 4117-D, dated the 28th August 1928, forwarding copy of a letter No. 7357, dated 13th August 1928, from the Secretary, Indian Central Cotton Committee, Bombay, and your subsequent letter No. 2008-D, dated 2nd April 1929, on the same subject, I have the honour to note that in the course of his letter the Secretary remarks that if the whole-sale mixing of American crop with *desi* is allowed to continue, the American crop will disappear; that the mixing of seed of the two varieties is bound to react in time on the general purity of the crop as grown, because the ginnery is one of the recognised sources of the seed supply. Finally the Committee note that the question is essentially a provincial one, and should be left to the Punjab Government to devise means and to take measures to put a stop to the mixing.

2. The letter also contains :—

(*i*) a suggestion that the Punjab Government should examine the question of mixing of *desi* and American cotton with a view to its prevention ;

(*ii*) a statement that the Indian Central Cotton Committee approves of the Director of Agriculture's suggestion to issue from time to time reports indicating the purity and area of the American cotton crop in the province ;

(*iii*) a suggestion that every assistance should be given to the Director of Agriculture in regard to the proposal to establish a Testing House without any financial liability devolving on the Indian Central Cotton Committee.

3. Regarding (*i*) the mixing of American and *desi* cotton I may state that this question has been receiving my close personal attention for many years and I have written a great deal about it, both to Government and to the Indian Central Cotton Committee. A recent opinion is given in paragraph 67 of the Annual Report of the Department of Agriculture for the year ending 1927-28. The problem is most important, and one which merits the serious attention of all concerned. I regret to say that the Indian Central Cotton Committee have not so far been able to make any workable suggestion for its solution.

4. It seems to me out of the question, at any rate, at present, to resort to legislation, as the consensus of opinion is opposed to it. If we could get 4F American cotton replaced by 289F it would be a help as 289F has longer staple than 4F, and, therefore, mixtures of *desi* cotton with it would be more easily detected in the hand sample of lint. 289F has also shown itself to be a rather heavier cropper than 4F for many years now, but it is rather a later cropper, and as I think somewhat disliked by farmers because it has very fuzzy seeds, whereas 4F seeds are almost bare of fuzz and more suitable for feeding to cattle.

5. Our policy so far has been to allow farmers to choose the variety of cotton which they wish to grow and I do not wish to depart from this, but I think we should do more to advertise the good qualities of 289F than we have done. It is proposed to discuss this suggestion at the next meeting of the Provincial Board of Agriculture and the decisions arrived at will be reported in due course.

6. With regard to (*ii*) *viz.*, the issuing of reports indicating the purity and area of American cotton crop in the various districts I have had arrangement for the past few years with the Chief Engineer, Irrigation Works, to get the requisite figures, and am now asking him kindly to issue instructions that complete information may be supplied to me by the 15th of December each year. If this request is complied with, a report on the percentage of purity of American cotton crop will be forwarded annually to the Secretary, Indian Central Cotton Committee, by the end of December. It does not appear practicable to supply this information earlier than the end of December or to issue more than one report in the course of the season.

7. Regarding (*iii*) the proposal to instal a testing house, a reference is invited to the orders received with your letter No. 2005-D, dated 2nd April 1929, intimating that the proposal has been abandoned for the present. This decision seems to have been based on information from certain quarters that for a bale of pure cotton a less price was offered in Bombay than would have been offered for it in the Punjab. From this it was possibly inferred that spinners are not prepared to give higher prices for pure consignments and consequently that it was useless to go on with a testing house. If this is so, the position is misunderstood. Millowners have declared that they are quite prepared to give higher prices for pure types of cotton of good quality provided they can get a guarantee of quality and sufficiently large consignments. The trouble is that the spinning qualities of a consignment of cotton cannot be accurately estimated from hand examination. Therefore the buyer has to make his purchase *largely on reputation of previous consignments.* Also it does not seem to be sufficiently realised that even if mixing of American and *desi* cottons were completely stopped, there are differences in value between badly grown and well grown lint from the same type so wide that they are as bad or worse from the spinners' point of view than mixtures of *desi* and American. What is needed to enable spinners to give higher prices for consignments is some guarantee of their quality. A machine test in a testing house such as I have proposed will overcome this difficulty, and consequently would do more to give farmers a fair price for the qualities of cotton they grow and would be a greater stimulus to farmers to grow better qualities of cotton than any thing that we have ever done for farmers in the Punjab. I, therefore, sincerely hope the case will be reconsidered. I am aware that an opinion is held in certain quarters that the system of selling cotton on a certificate of quality from a testing house would be impracticable on a large scale but it must be remembered that no one has ever tried this system and even if we assume that this apprehension is correct there is no reason why it should not be tried on a small scale to begin with and get accurate information on this all important point.

8. In regard to the fear expressed in the letter of the Indian Central Cotton Committee that there is danger that the American cotton would disappear it may be of interest to the Committee to see the acreages of it grown in the past three years.

9. In this connection, I also give overleaf figures showing in maunds quantities of 4F American cotton seed supplied to zamindars in the Punjab during the years 1927 and 1928 and the quantities purchased for supply during the sowing season (kharif 1929).

10. It is pertinent to mention here that in the last three years there has been a partial failure of the American cotton crop in many districts of the province and this rendered the purchase of sound seed for sowing purposes difficult in many cases.

11. Finally I may note that the problem continues to receive the consideration of this Department and I will make a further communication on the subject as soon as I am in a position to do so."

Enclosures.

Statement showing the area under American cotton in the Punjab, excluding Punjab States during the past three years.

Year	American cottons		Total
	Irrigated	Unirrigated	
	Acres	Acres	Acres
1925	1,146,107	1,672	1,147,779
1926	1,130,120	4,132	1,134,252
1927	749,440	890	750,330
1928	971,145	3,007	974,152

Statement showing the quantities of 4F American cotton sold to zemindars by the Department of Agriculture during the years 1927 and 1928 and quantities purchased for the purpose during Kharif 1929.

Circle of Deputy Director of Agriculture	Quantities supplied to zemindars during		Quantities for sale to zemindars
	1927	1928	1929
	Mds.	Mds.	Mds.
1. Hansi	600	....	1,020
2. Rawalpindi	5,401	6,192	6,214
3. Gurdaspur	5,731	254	600
4. Montgomery	6,916	6,594	5,280
5. Lyallpur	3,394	3,602	4,896
6. Multan	1,000	4,596	7,000
7. Jullundur	....	....	....
	23,042	21,238	25,010

Two other enclosures are appended Appendices 1 and 2*, namely (1) Statement showing percentage of *desi* cotton in American cotton fields in Kharif 1928 on various canals in the Punjab, and (2) Statement showing the civil districts in the jurisdiction of canal divisions of the Punjab.

* Not printed.

3. The Director of Agriculture, Punjab, refers in paragraph 3 of his letter to a recent opinion given in paragraph 67 of the Annual Report of the Department of Agriculture for the year 1927-28. This paragraph, which is of great interest, is reproduced hereunder:—

"*Mixing of cotton.*—It is to be regretted that the evil of mixing of American with Desi cottons to which reference has been made in previous reports continues to increase. In view of this, and the fact that the Agricultural Department takes up the attitude that the farmer shall be supplied with seeds of the types of cotton which he asks for, the areas of American cottons grown in irrigated tracts, considered as proportions to the total areas of cotton grown in these tracts in the past three years, are of interest. The figures are as follows :—

Year.	Proportion of American to total area of cotton grown in irrigated tracts.
1925 ..	.. 47·33 per cent.
1926 ..	.. 49·77 per cent.
1927 ..	.. 43·27 per cent.

From these figures it appears that farmers still get more profit by growing American instead of Desi cotton on good lands well watered, inspite of the extensive and shameless mixing of types which has taken place of late years and has obviously resulted in lowering the premium got for American, and inflating the prices of Desis. The profits which farmers get from growing the better qualities of cotton must have been seriously diminished, however, and the case merits the most serious consideration.

It is now perfectly clear that practically all the mixing takes place in the ginning factories ; indeed dealers take little pains to conceal the fact that they order certain mixtures of these cottons from the ginners. But as it is impossible to tell from a hand test what proportion of mixture a consignment of cotton contains, it is obvious that the buyer will always get a higher mixture of the cheaper Desi cotton than he expects to get. The lowering of the spinning quality caused by the inclusion of Desi fibre is, however, discovered at the spinning mill, with the result that the reputation of Punjab cottons comes down and in the following year the farmer gets a lower price for his cottons as compared with those of the world's markets.

It has been said that cotton spinners themselves ask for mixtures of cotton, but I cannot believe this, as it is clear that it must pay the spinner better to mix the cotton himself in the exact proportions he requires for the quality of yarn he wishes to make, than to buy unknown mixtures in which he is practically certain to get a lower value of cotton than he expects. On the other hand, it is equally clear that it pays middlemen better to deal in mixtures of cotton as there is almost a certainty of their being able to sell these to spinners for qualities above what they really are. But every time the spinner gets a lower quality than he expects he simply lowers his prices to that extent for following lots to cover his loss, and the middlemen continue their high profits by further increasing the mixture ; thus we get the progressive increase in mixtures which we have actually seen taking place in the province in the past few years. The farmer is the loser all the time as he never gets the proper market value of the cotton he is growing, and the question is, can this glaring injustice to farmers be righted ?

Personally I feel driven back to the conclusion that the whole trouble lies in the fact that cotton has to be sold *largely on reputation* ; it being impossible to estimate its value in a hand test. Consequently it seems to me that the real remedy lies in providing a machine test which will show its economic value, and then sell the cotton on a certificate of that quality. I have put forward this view to prominent members of the cotton trade on several occasions, but have met with strong opposition. This is to be expected from middlemen at least, as it would be no longer possible for them to sell a consignment of cotton for a quality other than what it really is, if this system comes into vogue, and the illicit profits made in the present day system of dealing would be completely cut out. After lengthy arguments in the Indian Central Cotton Committee, Bombay, I find the most that can be said against the proposed system is that it would be impracticable on a large scale. No one has ever tried it, and even if the statement were correct, why not try it on a small scale ? In the interests of farmers in the Punjab I sincerely hope that we will be able to do this. Many lakhs of rupees per annum are lost to farmers at the moment, and it seems to me worthwhile to risk a few thousand rupees in order to try to save that loss. The matter is being further looked into."

4. The Director of Agriculture, Punjab, considers that it is out of the question, at any rate for the present, to have recourse to legislation as the consensus of opinion is against it. A brief note has been prepared, a copy of which is attached (Appendix 3) dealing

with the subject of the licensing and inspection of cotton ginning and pressing factories from which it will be seen that the Indian Central Cotton Committee have, on several occasions, expressed the view that legislation is the only effective remedy against such abuses as the one under discussion in this note. In a letter dated the 14th May 1929 from the Secretary, Karachi Joint Cotton Committee, the following extract appears :—

"The introduction and enforcement of legislation would appear to be the only means of preventing mixing likely to be successful and my Joint Committee is very anxious that your Committee should impress as strongly as possible upon the Government of the Punjab the vital necessity of their taking immediate action to combat this evil."

5. The Director of Agriculture, Punjab, considers that the replacement of 4F American cotton by the variety 289F would help as "289F has a longer staple than 4F and therefore, mixtures of *desi* cotton with it would be more easily detected in the hand sample of lint. 289F has also shown itself to be a rather heavier cropper than 4F for many years now but, it is rather a later cropper and, as I think, somewhat disliked by farmers because it has very fuzzy seeds whereas 4F seeds are almost bare of fuzz and more suitable for feeding to cattle."

In connection with this proposal of Mr. Milne, there is one point which will require serious consideration. Punjab-American 289F is a notoriously neppy cotton, possibly as a result of the presence of a high percentage of immature and thin-walled fibres. I give below a comparison of certain spinning test results for 4F and 289F to illustrate this point :—

Season.	4F		289F	
	Waste per cent. Total loss.	Yarn tests. Neps per yard.	Waste per cent. Total loss.	Yarn tests. Neps per yard.
1924-25	16·3	1·4	17·2	5·6
1925-26	13·1	1·4	17·4	7·5
1926-27	18·4	3·1	23·6	28·7
1927-28	14·0	1·9	18·3	4·9
1928-29	18·1	4·5	22·5	15·7
1928-29	18·4	4·2	23·5	17·2

The Director, Technological Laboratory, comments upon 289F as follows :—

"The neppiness of this cotton detracts seriously from its value ; the great neppiness of the 1926-27 and 1928-29 samples makes them useless for many types of yarn."

Possibly this difficulty is one which the Cotton Breeder could, in time, overcome but I consider that the proposal to replace 4F by the existing variety 289F is one which, at present, would not commend itself to spinners.

6. In paragraph 6 of his letter, Mr. Milne comments upon the very useful work of issuing reports indicating the purity and area of American cotton crop in the various districts. Two such reports have been received, denoting the percentage of purity of the American cotton crop, one in 1925 and the other this year (1928-29). The later report forms Appendix I to this note and I have had the corresponding figures, where available, from the 1925 Report inserted in brackets alongside the current year's figures. The comparison appears to indicate that there is a very definite increase in the percentage of admixture of *desi* cotton *in the fields* and to support Mr. Milne's prophecy—made at the 6th meeting of the Indian Central Cotton Committee—that "the growers did very little mixing but when they saw mixing going on all around they, doubtless, did a little as well. He admitted there was a risk of this practice extending." The alternative is a deterioration of the seed supply due to mixing in ginneries but, in either case, the seriousness of the situation is evident.

7. In paragraph 7 of his letter, the Director of Agriculture briefly outlines his scheme for selling American cotton in the Punjab under some guarantee of quality. This scheme would necessitate the erection of a testing-house and, at the last meeting of the Punjab Provincial Cotton Committee, it was agreed that an experiment on these lines should be started on a small scale. The Punjab Government have evidently abandoned the proposal for the present but, in view of decision (3) of the Conference stated in the first paragraph of this note, the Committee will doubtless agree with Mr. Milne that it would be most desirable to conduct such an experiment in order, at the least, to determine the practicability of the testing scheme on a large scale.

8. With regard to decision (2) of the Conference (reference paragraph 1 of this note), the replies of the Bombay and Ahmedabad Millowners were placed before the Committee at its last meeting (December 1928). The Japan Cotton Spinners' Association have circulated to their members a Japanese translation of the Committee's letter on the subject. The International Federation of Master Cotton Spinners' and Manufacturers' Association have informed us that the Committee's letter was published in the November issue of the "International Cotton Bulletin", page 161. This publication reaches every cotton spinning mill in Europe and Japan and it was considered that this was the best way of attracting the attention of spinners to the mal-practice of mixing Punjab-American cotton and to the way of avoiding it.

9. The 4th decision of the Conference, regarding the desirability of fixing a uniform staple standard for the Punjab-American contract in Bombay and Karachi, is dealt with under a separate subject on this agenda. It may be mentioned, however, that an agreement on this important matter has been arrived at for the present cotton trading season as the Karachi Joint Cotton Committee have agreed tentatively to adopt for one year the 6/8″ staple.

10. The question of the mixing of Punjab-American cotton has come very frequently before the Indian Central Cotton Committee and references to this problem are scattered throughout the Minutes and Proceedings of the Committee. I have considered it desirable to collect and summarize in one Note the deliberations of the Committee on this problem for the convenience and information of our members. A copy of the Note is appended (Appendix 4).

APPENDIX I.

Statement showing percentage of Desi Cotton in American Cotton fields in Kharif 1928 on various canals in the Punjab.

Canals.	Area in acres containing 5 per cent Desi plants or less.	Area in acres containing 6 to 10 per cent Desi plants.			Area in acres containing 11 to 15 per cent Desi plants.			Area in acres containing 16 to 25 per cent Desi plants.			Area in acres containing 26 to 35 per cent Desi plants.			Area in acres containing 36 to 50 per cent Desi plants.			Remarks.	
1	2	3			4			5			6			7			8	
		1929 per cent	*1925* per cent		*1929* per cent	*1925* per cent		*1929* per cent	*1925* per cent		*1929* per cent	*1925* per cent		*1929* per cent	*1925* per cent		*1929* per cent	*1925* per cent
Lower Bari Doab ..	47,967	44·8	(63·0)	15,705	14·7	(16·1)	13,758	12·9	(8·8)	11,368	10·6	(5·6)	8,997	8·4	(3·3)	9,216	8·6	(3·2)
Upper Chenab ..	2,203	43·6	(59·3)	938	18·6	(14·5)	729	14·5	(9·1)	667	13·2	(9·0)	284	5·6	(3·4)	231	4·5	(4·7)
Lower Chenab ..	135,724	55·4	(76·4)	31,829	13	(10·7)	19,858	8·1	(5·9)	27,711	11·3	(3·9)	14,171	5·8	(1·7)	15,661	6·4	(1·4)
Upper Jhelum ..	21,794	50·2	(60·2)	10,527	24·2	(16·8)	5,780	13·3	(9·0)	2,495	5·8	(6·1)	1,586	3·7	(3·6)	1,267	3·0	(4·3)
Lower Jhelum ..	22,400	30·2	(60·0)	22,222	30·1	(17·7)	13,033	17·7	(9·2)	7,317	9·9	(6·8)	4,863	6·7	(3·5)	4,021	5·4	(2·8)
Total ..	230,088	48·5	(68·8)	81,221	17·1	(13·6)	53,158	11·2	(7·5)	49,558	10·4	(5·1)	29,901	6·3	(2·6)	30,426	6·5	(2·4)
Sutlej Valley ..	3,048			4,145			2,655			1,546			715			1,052		
Grand Total ..	233,136			85,366			55,813			51,104			30,616			31,478		

APPENDIX 3.

The Licensing and Inspection of Cotton Ginning and Pressing Factories.

The Indian Cotton Committee of 1919, in considering the numerous malpractices which were damaging the reputation of Indian cottons passed, among others, the following resolutions :—

"All ginning and pressing factories should be licensed, a preliminary to the issue of licenses being the assignment to all factories of distinctive numbers and marks which would enable the cotton dealt with in them to be traced."

"Licenses should only be granted on certain conditions and should be withdrawn for breach of those conditions and on proof of such malpractices as damping, mixing and adulteration."

"All ginning and pressing factories should be brought under the operation of the Factory Act and required to take out licenses, irrespective of the number of hands employed."

"Licenses should be withdrawn by the Local Government on the recommendation of the Central Committee, after the procedure* laid down has been followed."

"Suitable penalties should be imposed in the case of factories working without taking out a license or after a license has been withdrawn."

The conditions upon which licenses should be granted are fully stated in paragraph 225 of the Report of the Indian Cotton Committee (1919) and need not be recapitulated in this note.

The Indian Central Cotton Committee, which was formed as a result of a recommendation of the Indian Cotton Committee, considered the subject of the licensing of gins and presses at their first meeting (July 19th, 1921). A lengthy discussion took place from which it was obvious that the general opinion of the meeting was decidedly in favour of the licensing proposals. This support was chiefly based upon the necessity for checking the abuses and malpractices which, to common knowledge, were rampant in gins and presses and which were adversely affecting the reputation of Indian cottons. Objections to the proposal were mainly directed against details in the scheme put forward by the Indian Cotton Committee but it was pointed out that, if the decision to introduce licensing was arrived at, it would be quite possible to exclude such conditions as appeared objectionable to certain sections of the trade. The scheme for licensing gins and presses would provide the trade with a weapon with which it could protect itself against abuses which were the ground for common complaint.

It is interesting to note that the representatives of Hyderabad and Baroda States were strongly in favour of the licensing proposals.

Finally a strong Sub-Committee, under the Chairmanship of Mr. H. A. F. Lindsay, was appointed to consider the general principle of licensing gins and presses and to consider any alternative means of dealing with abuses. The Sub-Committee were also asked to consider the safeguards necessary, if legislative control was decided upon.

The Sub-Committee reported to the full Committee on the 20th July 1921. They agreed that the proper marking of bales at the press was essential, that press records should be maintained which would enable the ownership of every bale to be established and that statistical returns should be compulsory. They were not in favour of standard plans for new presses but considered that steps should be taken to ensure, if necessary by legislation, that in all new ginning factories separate exits and entrances should be provided and other certain minimum requirements provided for. Plans should be submitted for approval to Provincial Cotton Committees or Provincial Agricultural Departments. The Sub-Committee considered in detail the different conditions proposed by the Indian Cotton Committee (paragraph 225 of the Report) and gave their opinion on each of those. The Central Cotton Committee, after discussing the report of the Sub-Committee, passed the following resolution :—

"The Central Cotton Committee consider that an all-India Act should be passed by the Central Legislature empowering Local Governments to frame Rules with a view to giving effect to all or any of the above recommendations. The principal Act should enforce the marking of bales and the maintenance of proper press records and the furnishing of statistical returns."

No resolution was passed on the primary question of the licensing of gins and presses as the Sub-Committee confined their discussion and report to the different conditions proposed by the Indian Cotton Committee for gin licenses with a view to coming to conclusions as regards general principles before discussing the machinery required.

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*Paragraph 229—Report of the Indian Cotton Committee (1919).

At the third meeting of the Indian Central Cotton Committee (July 17th and 18th 1922) a discussion on the regulation of gins and presses took place. It was pointed out that the Indian Central Cotton Committee were not prepared, at present, to go further than the resolution based upon the report of the Special Sub-Committee at the first meeting and did not contemplate an All-India Licensing system. However there was nothing which might prevent a Local Government from introducing its own licensing system if it deemed it advisable to do so. At a meeting of the Local Sub-Committee held on 7th May 1923 (6th meeting) the mixing of *desi* and American cotton in the Lower Bari Doab Colony, Punjab, was discussed. It was generally agreed that the licensing of gins and presses offered the only *permanent* solution of this problem and it was decided to obtain the opinions of officials and associations concerned on the adoption of this remedy.

A further discussion on the mixing of Punjab-American cotton took place at the 5th meeting of the Indian Central Cotton Committee (31st May 1923) when the Vice-President in introducing the report of the Local Sub-Committee on the subject, stated that the Sub-Committee felt that the real solution of the problem was in the licensing of gins and presses. It was pointed out in the subsequent discussion, that the penalty of closing a factory, for a whole season, which could be enforced if licensing was introduced, would be most effective in checking the malpractice of mixing. The high reputation of the cotton in Rajpipla State, where the gins had been State-controlled during the past two years, was cited as an example of the benefits resulting from a licensing system. The following resolution was passed, unanimously :—

"That the proceedings and correspondence* be placed before the Punjab Government who should be asked if they could suggest any remedy for the mixing of Punjab-American cotton other than the licensing of gins and presses. In view of the fact that no meeting of the Punjab Provincial Cotton Committee has yet been held we suggest that this matter be referred to them at an early date."

From the above it appears obvious that the Indian Central Cotton Committee, while fully in agreement with the licensing of gins and presses as a check on malpractices, were not prepared to recommend such a step until all other methods of dealing with the abuse of mixing Punjab-American and *desi* cottons had been thoroughly investigated and tried.

At the 9th and 10th meetings of the Local Sub-Committee (16th July and 13th August 1923) the regulation of gins and presses and, particularly, the rule-making power to provide for the paving of press-houses, use of standard weights, separate exits and entrances for *kapas* and certain other minimum requirements in the case of new factories were discussed. The question as to whether the Act should contain an enabling clause to allow Local Governments to introduce a provincial system of licensing of gins and presses was considered. Replies from Local Governments had shown that, whereas some Provinces had definitely asked for this power, other Provinces were not in favour of a licensing system. It was finally decided that a proviso should be introduced that these powers should only be put into force if approved by the Local Legislative Council.†

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*Letter from Director of Agriculture, Punjab, and the proceedings of the Lower Bari Doab Agricultural Association—not attached.

†Extract from Report of Local Sub-Committee.

Although the Central Cotton Committee did not favour an All-India system of licensing gins and presses, they made it quite clear to the Government of India that each province should be free to introduce licensing if they found it necessary and practicable. We recommend that the Bill should include an enabling clause to this end.

Replies from Local Governments are not unanimous on this point, but several Governments, notably Punjab and Bombay, distinctly favour this proposal while others consider it unobjectionable. The Madras Government consider that the licensing of gins and presses will be found necessary but, if so, it should be provided for by central legislation.

The Sub-Committee are of the opinion that the question of licensing gins and presses can best be dealt with on the same lines as was successful in the case of Cotton Transport Act and that the Bill should contain an enabling clause only to be brought into effect with the approval of the Provincial Legislative Council. This course appears to have many advantages. It enables the principal Act to lay down the procedure for licensing (so far as it is possible to do so for all India) thus enabling the Indian Legislature to see the exact trend of these proposals instead of being asked to give unlimited powers to Provincial Legislatures. No province need bring the system of licensing into force unless it is required and no province can bring it into force except with the approval of their own Legislative Council.

At the 6th meeting of the Indian Central Cotton Committee the following resolution—amongst others—dealing with the regulation of gins and presses was moved :—

"The All-India Act should also include an enabling clause empowering Local Governments to introduce a system of licensing of ginning and pressing factories. This clause should only be operative if brought into effect by a notification approved by resolution of the Provincial Legislative Council.

The resolution was opposed on the grounds that it would interfere with the liberty of the factory owner and the fear was expressed that a large amount of inspection would be involved. On the other hand it was stated that the Committee did not desire licensing throughout the whole of India and that, under the Bill as drafted by the Local Sub-Committee, the Local Governments could put licensing into force if they considered it necessary. There was no force in the objection that the notification could be rushed through without due consideration of the interests involved and the clause providing for reference to the local Legislative Council was an adequate safeguard. The Committee had already decided that an all India Act to enforce licensing uniformly was not practicable and it was only in certain areas that it might be necessary to license gins and presses as a measure for checking the mixing of cotton which could not be adequately dealt with by other methods. The resolution was carried by a large majority.

The Local Sub-Committee, previous to the 7th meeting of the Indian Central Cotton Committee, (January 28th-30th 1924) had discussed certain criticisms on the licensing clause regarding licensing of gins and presses which had been recommended for incorporation in the Cotton Ginning and Pressing Factories Act. Their reply to these criticisms formed the subject of a report to the 7th meeting of the Central Cotton Committee. The Local Sub-Committee adhered to their opinion that the actual licensing of gins and presses would be necessary in certain areas, particularly to deal with the evil of cotton mixing which was causing serious economic loss to the growers and to the country as a whole.

The Sub-Committee stated that the offences for which the penalty of suspension of license was intended to apply were not definitely stated in the draft Bill as it was thought that these should be left to Local Governments to deal with in issuing their notifications. However they recommended that the offences for which licenses may be suspended should be as follows :—

(1) The mixing of two or more separate descriptions of cotton, the mixing of which has been prohibited by the notification under clause 8.
(2) Fraudulent packing (as defined by the East India Cotton Association).
(3) Damping cotton by means of water deliberately applied for that purpose prior to pressing when such damping has been conclusively proved.

The Sub-Committee, in their report, also dealt with certain questions of judicial procedure in the matter of suspension of licenses and the penalties to be enforced for contravention of the Act. They attached the greatest importance to the inclusion of provision for licensing in the Bill and added that in the Sudan the licensing of ginning factories was in force on a considerably more drastic scale than had been proposed in India.

The report of the Sub-Committee was adopted at the 7th meeting of the Indian Central Cotton Committee.

At the 8th meeting of the Indian Central Cotton Committee (July 7th, 8th and 9th, 1924), the following resolution was moved and carried :—

"That the Central Cotton Committee, after having given full consideration to the proceedings of a meeting of the cotton growers, ginners and traders with members of the Provincial Cotton Committee held at Lahore on the 19th March 1924 and to the proceedings of the Provincial Cotton Committee, held at Simla on 23rd June 1924, is convinced that the licensing of gins and presses will provide the only remedy for mixing in the Punjab, that is likely to have immediate and practical effect.

The Committee also wishes to impress upon the Government of India the desirability of putting the Gins and Presses Bill before the Legislature with as little delay as possible."

In the very lengthy discussion which took place interest centered principally round the enabling clause for the licensing of gins and presses which the Committee had recommended for inclusion in the Bill. It was obvious that there was a considerable body of objection to the licensing clause, which was delaying the progress of the Bill. Discussion took place as to where the bulk of the mixing was done, some members being of the opinion that it was practically confined to the ginning factories whilst others contended that the great mass of cotton arrived at the factories already mixed and that, therefore, the licensing of gins and presses would not check the evil. In this connection the experience

of the Indian Cotton Committee was quoted and it was stated that they were convinced from the evidence they received in the Punjab that the bulk of the mixing took place in the factories, both ginneries and presses, and that the complaints were entirely justified.

At the 9th meeting of the Indian Central Cotton Committee (4th December 1924) it was stated that the Government of India had introduced the Cotton Ginning and Pressing Factories Bill at the last session of the Legislative Assembly and it had been circulated for opinion. *The licensing clause had been entirely omitted.* However this was understood to have been done in order not to prejudice the chances of the whole bill and the question of licensing could be taken up later if it was still found necessary.

The Cotton Ginning and Pressing Factories Act (Act XII of 1925) was passed on the 18th March 1925. No enabling clause to deal with the licensing of gins and presses was included in the Act. In view of the continued complaints of abuses and malpractices, *e.g.*, watering, mixing of cotton, etc., which were being brought to the notice of the Central Cotton Committee, the following resolutions were passed by a majority at the 15th meeting of the Indian Central Cotton Committee (July 18th and 19th, 1927) :—

"That in view of the continuance of malpractices in cotton ginning and pressing factories the question of introducing the actual licensing of such factories should now be re-examined.

That the Cotton Ginning and Pressing Factories Sub-Committee be requested to report to the next meeting of the Central Cotton Committee :—

(*a*) In what areas malpractices are so prevalent as to make necessary the licensing of cotton ginning and pressing factories.

(*b*) For what offences licenses should be suspended or revoked.

(*c*) How such offences are to be defined and proved.

(*d*) What machinery should be set up for controlling licenses and dealing with offences."

In the course of the discussion, it became evident that, although opinion on the advantage of licensing was divided, it was generally agreed that the malpractices complained of were so serious and so widespread that the possibility of checking these by the introduction of a licensing system in certain areas should be thoroughly investigated.

At the 16th meeting of the Indian Central Cotton Committee (December 12th, 13th and 14th, 1927) the report of the Cotton Ginning and Pressing Factories Sub-Committee on the checking of malpractices in cotton ginning and pressing factories was presented. The Sub-Committee's report stated that they had given careful consideration to methods whereby the trade itself could take steps to check abuses and malpractices without having recourse to legislative action. Considerable discussion took place on this aspect of the question and the opinion of the meeting on the desirability or otherwise of introducing a licensing system were extremely divided. Finally the debate was narrowed down to the question of mixing of pure American cotton in the Punjab and a resolution was passed appointing a Special Sub-Committee from the Central Cotton Committee and the Karachi Joint Cotton Committee to investigate this aspect of the problem and to report to the Central Cotton Committee at its next meeting.

The Sub-Committee appointed at the 16th meeting of the Central Cotton Committee and consisting of representatives of the Indian Central Cotton Committee and the Karachi Joint Cotton Committee met on the 16th January 1928. The report of this Sub-Committee was considered in detail by the Local Sub-Committee. Among other recommendations which aimed at enabling the trade to deal with the abuses of mixing, the Sub-Committee formed the conclusion :—

"That legislation in some form was the only real solution but that every effort should be made in the meantime to introduce palliatives."

The Special Sub-Committee could come to no agreement about the form which such legislation should take but decided that it was prepared to recommend it if suitable legislation could be found.

The report of the Local Sub-Committee, incorporating the report of the Special Sub-Committee was presented at the 17th meeting of the Indian Central Cotton Committee (July 30th and 31st 1928) and was adopted. At this meeting, the Local Sub-Committee also stated in their report that they had been asked to advise upon the form of licenses of cotton ginning and pressing factories proposed to be adopted in Hyderabad State and that they had suggested a few amendments which had been incorporated in the License form.

APPENDIX 4.

A note on the problem presented by the mixing of American and "Desi" cottons in the Punjab.

1. Serious attempts to introduce the cultivation of American cotton into the Punjab may be said to date from 1902 and, up to 1911, the success obtained was very small. At first, seed was imported from Dharwar but this policy was abandoned in 1912 when it was evident that the American cotton grown in the Punjab was an improvement on the Dharwar types. Selection work on American types was carried on at Lyallpur and resulted in the production of two types, 3F and 4F but, it was later decided to abandon the former of these, which, being a smooth leaved variety, was extremely susceptible to jassid attack. Since 1913, the 4F variety has spread very rapidly and, in 1919, when the Indian Cotton Committee reported, there were estimated to be at least 300,000 acres of pure 4F cotton and between 50,000 and 60,000 acres of other American varieties under cultivation.

2. Writing in 1915, Mr. W. Roberts, B.Sc., then Professor of Agriculture, Lyallpur, estimated that the premium given for American cotton over "*desi*" was, at least, Rs. 1-8-0 per maund and, with an average yield of 6 maunds, the extra profit on that year's crop to the zamindars was Rs. 6,30,000.

Mr. Roberts also states that complaints of mixing of American cotton with "*desi*" were even, at this early stage, being received from exporters, who asserted that the American cotton then marketed contained 25-30 per cent. *desi* cotton. In Mr. Robert's opinion such heavy mixing was "due (1) to middlemen through whose hands the cotton had to pass and (2) to admixtures of types of American some being of shorter fibre than the main crop and confused by exporters for '*desi*'. The second reason was not applicable to the case of the pure 4F variety. Mr. Roberts also states that "one of the great difficulties is the mixing with "*desi*" that occurs—this is in the opinion of the writer largely the fault of ginners and in some cases, of spinners—one such case occurred here in April when a Bombay spinner ordered mixed American and '*desi*' cotton".

In 1916, the same authority again writes on the subject of mixing :—

"The marketing of American cotton still leaves much to be desired. The trade is mostly in the hands of Indian ginning factory owners at present, the European firms having done a comparatively small business up to date. Bombay is the chief buyer. What is curious about the business is the almost universal mixing that goes on in the ginning factories. The usual grade sent to Bombay contains from 10 to 30 per cent. of *desi* cotton. Some of the factory owners are very frank over this mixing, and the writer has often seen American cotton with 20 to 30 per cent. of *desi* being added to it before ginning, especially in the Jhang District. One reason for this is that *desi* cotton has a better colour than American and no doubt the mixture looks whiter than pure American. One would expect spinners would find the defect. Individual spinners in Bombay stoutly deny that they want such mixtures, yet that is what they mostly get and pay for.

It might be pointed out that the ginning outturn of all cottons was low last year, and thus there was more than the usual percentage of short fibres. This fact no doubt facilitated mixing with *desi*.

The dangers for the seed from this and other causes will probably make it necessary to brand 4F bales in future. The point is receiving careful attention. It is satisfactory to note that this year as well as last year a good deal of cotton was sent pure both to Bombay and Nagpur."

3. In 1919, Mr. Roberts contributed a very valuable article to the Agricultural Journal of India, Volume XIV, Part I, page 42 *et. seq.* dealing with "Some of the Problems arising out of the successful introduction of American Cotton in the Western Punjab." By this time the premium for American cotton over "*desi*" had risen to Rs. 4 to Rs. 5 per maund and the work of the Agricultural Department of the Punjab was being largely directed to improving the system of sales, seed supply. etc., in order to ensure that the advantage of this enhanced price reached the actual cotton growers. Mr. Roberts' remarks on the mixing problem at that time are as follows :—

"Much of the American cotton produced in the Colonies was sent to Bombay mixed with *desi* cotton, the latter being put in to the extent of 10 to 25 per cent. and sometimes even more. This mixing was partly accidental owing to over-crowding in ginning factory compounds and also mainly deliberate. Zamindars grow these cottons pure nowadays, and it is rare to see a field of American with over 5 per cent. *desi*. It is easy to detect mixture in the *kapas* and zamindars are heavily penalized both in the Department's auctions and by factory owners for admixture of *desi* cotton ; hence the rapid disappearance of mixtures in the field. When the cotton is ginned it is very difficult to detect

even 10 per cent. mixture, and hence mixture in baled cotton is not uniformly or adequately penalised in Bombay. This practice must ultimately affect every one, even those who try to send American pure to Bombay. A remedy must be found up-country. Ultimately no doubt it will be necessary to license ginning factories and use this handle to penalize mixing. As a first step in remedying this and other evils, the Punjab Government have accepted certain suggestions of the writer regarding conditions under which any new factories can be built. Probably some sort of combination among factory owners in the form of an Association which could be recognised in Bombay is the only reliable and constructive manner of tackling this difficulty. Membership of this Association would involve responsibility and an undertaking to send cotton of definite purity. The penalty for breach of these conditions would have to be a heavy fine or loss of membership. Such an Association would command confidence in Bombay and be to the interest of ginners themselves as well as that of zamindars."

It may be noted that Mr. Roberts still attributes the blame for mixing, whether accidental or otherwise, to the ginning factories and suggests as a remedy the licensing of such institutions. He also declares that practically none of the mixing takes place in the fields of the cultivators.

4. In the same year, 1919, the Indian Cotton Committee issued their very comprehensive report and it is somewhat remarkable to note that in the chapter dealing with the Punjab, practically no mention is made of the serious menace to the American crop in that Province which the practice of mixing involved. As a matter of fact, the report states that, as a result of propaganda done by the Agricultural Department, the cultivators were uprooting any plants of "*desi*" cotton found growing amongst American and "that the crop of the latter is now brought in practically free from any admixture". However, this question of mixing was considered by the Committee in their investigations upon the commercial side of cotton growing and led largely to their decisions to recommend the licensing of gins and presses. In the Report of the Committee, Part II, Chapter XVI, paragraph 222, page, 137, it is stated that:—

"Whilst the prohibition of transport of cotton by rail and sea except under the restrictions suggested above will stop the import of cotton for mixing purposes, it will not stop the mixing of different varieties which grow side by side in the same tract, such as Punjab *desi* and Punjab-American, Bengals and Khamgaon Akolas and ordinary Tinnevellies and *Karunganni*. We are referring here to the case of deliberate mixture in the ginneries and presses. With the mixture for which the cultivator and the village *bania* are responsible we have already dealt. Cases were brought to our notice in which the owners of ginneries and presses in the Punjab deliberately mixed Punjab *desi* cotton with Punjab-American to the extent of twenty per cent. as they found that they would get a better price proportionately for the mixture than if the cotton were sold pure. In order to stop practices of this kind, we think that the only course is for the trade to penalize the mixed cotton. This will be easier in the future than it has been in the past if our proposals in regard to the marking of bales are accepted, as it will then be easy to trace the persons responsible for the mixture. We are unable to suggest any other remedy in cases of this kind owing to the impossibility of detecting a small mixture of inferior cotton before the cotton of which it forms part has passed through the spinning machinery. Much the more important part of the mixing which goes on will be prevented if our recommendation in regard to the prohibition of transport by rail and sea is accepted and such of it as results from the growing of different varieties side by side in the same area should diminish as each cotton growing tract becomes more and more the home of one variety only, as is contemplated in our recommendations in the provincial chapters.

223. Whilst we feel that the recommendations we have made in the preceding chapters will do much, if adopted, to enhance the reputation of Indian cotton, we are of opinion that they are not, in themselves, sufficient to stop the malpractices we have described and that this result can only be secured by a system of licensing, ginning and pressing factories. In making proposals to this effect, we have given full consideration to the history of the Bombay Cotton Frauds Act. We shall revert to this point later and hope to show that the scheme we put forward is not open to the objections which were urged against that Act and which finally led to its repeal in 1881. We realise the importance of ginneries and presses as a necessary link in the cotton trade between buyers and consumers and wish to emphasize that nothing we propose will, in the least, interfere with legitimate ginning and pressing. Control of ginning and pressing factories, however, appears to us to be the only way in which the reforms we consider essential can be brought about, more especially as the conditions under which cotton is ginned are rapidly becoming worse in large areas, such as the Cambodia tract in Madras, owing to the erection of a large number of small factories containing sometimes as few as three or four gins.

We recommend, therefore, that all ginning and pressing factories should be required to take out licenses, the authority which would issue and withdraw such licenses being the Local Government acting in consultation with the Central Cotton Committee and the Provincial Committees in accordance with the scheme which we have proposed in Chapter XIX. For this purpose, it would be necessary to have an Act of the Governor General in Council in the framing of which the Central Cotton Committee would be consulted. It would also be consulted in regard to any rules framed under the Act by Local Governments."

It is interesting, in view of later developments, to note that the Indian Cotton Committee lay great stress upon the trade being placed in a position to deal with such malpractices itself and that they point out the extreme difficulty of detecting small admixtures of "*desi*" in American cotton after the bales leave the press.

5. At the 5th meeting of the Indian Central Cotton Committee (31st May 1923) a report was submitted by the Local Sub-Committee on the mixing of Punjab-American cotton. The main decisions of the Sub-Committee were :—

(*a*) that the mixing was chiefly done in the gins and *not* by the cultivator,

(*b*) that, as American and *desi* cottons are grown side by side in many parts of the Punjab, owing to limitations of canal supply and soil conditions, the Cotton Transport Act would not be of any material assistance in checking mixing in these particular tracts,

(*c*) that the re-establishment of the Agricultural Department's auction sales of Punjab-American cotton would be of temporary assistance and would, at least, safeguard the seed supply,

(*d*) that the only real remedy was in the adoption of the Central Cotton Committee's recommendations for the regulation of gins and presses, including the provincial licensing of gins and presses.

In the full discussion, which took place on the report of the Sub-Committee, the general opinion was expressed that evidence showed that mixing largely took place at the ginneries and that licensing would be the most suitable method of checking the malpractice. The alternative opinion was also put forward that mixing was largely a question of supply and demand. *i.e.*, exporters and buyers wanted mixed cotton, *e.g.*, 10 per cent. *desi*—for which they paid Rs. 2 per maund less than for pure Punjab-American—and therefore mixing was encouraged. To counteract this, it was suggested that the East India Cotton Association should provide a contract based on staple length, *viz.*, two classes of $\frac{7}{8}$" and 1" staple—and so there would be an inducement for buyers to gin separately and keep *kapas* pure. However it was pointed out that there was already a stipulation regarding the minimum length of staple (6-8") required for Punjab-American cotton tendered against the Broach contract and furthermore that, even under present conditions, the tenders of Punjab-American cotton against hedge contracts was practically nil. The East India Cotton Association could only deal with cotton which came to Bombay—and that only if tendered against hedge contracts—and could have no say in up-country conditions. It was strongly denied that buyers and exporters wished mixed cotton but that they had to accept it for want of anything better. Genuine stapled cotton found ready buyers, both among mill-agents and exporters, and fetched top prices. In support of the proposal for licensing gins and presses, it was mentioned that, during the past two years, ginneries in the Rajpipla State had been State controlled and no mixing had been allowed. As a result Rajpipla cotton had reached a high standard of purity and was fetching high prices. It was finally decided that the report and proceedings should be submitted to the Punjab Government, who should be asked if they could suggest any remedy for the mixing of Punjab-American cotton other than the licensing of gins and presses.

6. At the 6th meeting of the Indian Central Cotton Committee (6th September 1923) the subject of mixing of Punjab-American cotton was again fully discussed. Considerable opposition was brought forward to the proposal for licensing of gins and presses. The main objections were :—

(*a*) that other methods of dealing with the malpractice had not been fully examined,

(*b*) that if licensing was introduced, the factory-owners might easily be made responsible for the sins of other persons, *e.g.*, merchants, middlemen, zemindars, etc.

(*c*) that licensing of gins and presses would not check mixing which would go on outside the factories,

(*d*) that experience of the working of legislation proposed for marking of bales should be gained before the introduction of licensing legislation which might alienate the sympathies of Punjab factory-owners.

7. The Director of Agriculture, Punjab (Mr. D. Milne), submitted an alternative scheme whereby Punjab-American cotton would be submitted to a series of standard tests and sold, like certain foodstuffs, on a basis of purity and quality. He proposed that machinery should be installed to determine blow-room loss and spinning plants to test spinning value. He said that, to begin with, it would be sufficient to determine blow-room loss and percentage of short fibres. It was essential that the necessary machinery should be set up and that men should be arranged for who would sell cotton on certificates of such tests. Mr. Milne suggested that the means of arranging such tests should be thoroughly investigated and that experiments with this system of trading should be attempted on a small scale to begin with. No legislation would be necessary and growers would have an incentive to grow more and better cotton and to keep their grades separate. These proposals were criticised chiefly on the grounds that they presupposed that growers could hold their *kapas* until it was ginned and the lint duly tested and that a buyer could then be readily found on the basis of the test. As growers had necessarily to market their *kapas* without delay, such arrangements for testing and sale on certificate were not deemed practicable.

8. The question as to where the bulk of the mixing took place was rediscussed and it was agreed that the growers were not responsible but that it mostly took place at the ginneries. It was pointed out, however, that if mixing in the ginneries was allowed to continue, there would be a serious risk of the growers adopting the same malpractice themselves as the mixing of *kapas* in ginning factories was responsible for mixed seed being issued to growers. The conditions in the Punjab were compared with Sind, where, it was stated, *kapas* was brought to the gins mixed to an extent, of 5-20 per cent. *desi*, and no great amount of mixing took place at the gins. This mixture in the fields was said to be due to defective germination of staple cottons on account of alkaline conditions and to the practice of filling in the blanks thus caused with *desi* seed. Finally, the urgency of the problem and the necessity for an immediate remedy were emphasized in view of the increasing export of Punjab-American cotton and its importance to Indian mills. Mixing was undoubtedly increasing and the reputation of the whole crop was threatened.

9. Two resolutions were passed by the Committee, firstly that the Committee was of the opinion "That the licensing of gins and presses in the Punjab is an essential step towards stopping the loss to the cotton growers and the general economic loss to the province caused by the present mixing of *desi* and Punjab-American cotton" and secondly "that Mr. Milne's proposals for selling Punjab-American cotton on the basis of tests for staple length, percentage of dirt, stained cotton and moisture should be investigated as soon as the equipment of the Committee's experimental spinning plant and Laboratory is sufficiently complete."

10. At the 8th meeting of the Indian Central Cotton Committee (7th July 1924), reports of meetings of the Punjab Provincial Cotton Committee held on 19th March 1924 and 23rd June 1924 were considered, and the following resolution was passed :—

Resolution 2.—"That the Central Cotton Committee, after having given full consideration to the proceedings of a meeting of the Cotton Growers, Ginners and Traders with members of the Provincial Cotton Committee held at Lahore on the 19th March 1924, and to the proceedings of the Provincial Cotton Committee held at Simla on 23rd June 1924, is convinced that the licensing of gins and presses will provide the only remedy for mixing in the Punjab, that is likely to have immediate and practical effect.

The Committee also wishes to impress upon the Government of India the desirability of putting the Gins and Presses Bill before the Legislature with as little delay as possible."

11. It was stated that, even if the licensing of gins and presses was enforced, there was nothing which could prevent a ginner from getting the cotton mixed outside his factory and thus defeating the object of the measure. The Director of Agriculture, Punjab, stated that if it were not for mixing, the whole Punjab-American crop would soon be all pure as the Agricultural Department were supplying annually enough seed to sow 30 to 40 per cent. of pure crop. He also said that endeavours were being made to start co-operative unions of farmers who would gin, grade and press their own cotton and thus the spinner would have some chances of obtaining cotton of the quality grown. Another speaker pointed out that the third picking of American cotton—which was worse in quality even than *desi*—was commonly mixed with the first and second pickings and brought to the factories. He said that the proposed scheme of licenses would be ineffective and that the remedy lay with the buyers who could completely check the malpractice if, for four or five months, they refused to purchase mixed cotton. With regard to the place where mixing took place, attention was called to the report of the Indian Cotton Committee who stated in their report that evidence was overwhelming

that, in the Punjab, the bulk of mixing took place in factories, ginneries and presses. With regard to the statement that the remedy was in the hands of the buyers, it was pointed out that the buyers were making money from mixed cotton but the growers were suffering from the malpractice. As long as it was possible for money to be made by mixing, mixing would continue and herein lay the necessity for legislative action on the lines of the licensing of gins and presses in order to protect the growers' interests.

12. At the 13th meeting of the Indian Central Cotton Committee (5th July 1926), a report was presented on the purity of Punjab-American cotton as grown in the fields. The report was based on a special survey carried out by the Irrigation Department and referred to no less an area of American cotton than 570,000 acres. Over the whole province 70 per cent. American cotton was found to be practically pure while in the Lower Chenab Canal Colony, which comprises rather more than half the area, the percentage of cotton containing less than 5 per cent. *desi* was 76 per cent. Much of the Punjab-American cotton which came on the market contained over 25 per cent. of *desi* and the report indicated that only 5 per cent. of the area grown was mixed to this extent. Thus there was no comparison between the purity of the *kapas* as produced and the cotton when it leaves the pressing factories.

13. At the 15th meeting of the Indian Central Cotton Committee (18th July 1927) the Subject of malpractices in cotton ginneries and presses, including mixing was discussed at some length. With regard to the Punjab, it was pointed out that the results of the special survey, which had been held, showed conclusively that the mixing of Punjab-American with *desi* was not due to the growing of the cotton mixed in the field but that the mixing took place after the cotton was picked and that everything pointed to such mixing taking place in the ginning factories. A suggestion was made that the Local Sub-Committee should examine the feasibility of establishing a scheme for the grading or certifying of Indian cotton for export but this was not adopted by the Committee. Finally it was decided that the whole question of licensing of gins and presses should be fully re-examined by the Cotton Ginning and Pressing Factories Sub-Committee both with reference to the definition of the offences and the administration of a licensing system.

14. At the 16th meeting of the Indian Central Cotton Committee (12th December 1927) a general discussion was held on malpractices in cotton ginning and pressing factories, *e.g.*, watering, mixing and false packing. Special references were made to the Punjab problem and it was stated that the Cotton Ginning and Pressing Factories Sub-Committee had considered the matter along with a deputation from the East India Cotton Association and had given the opinion that legislation was the only real remedy. The theory was again advanced that mixing of cotton largely went on because there was a steady demand from consumers for such mixed cotton and that, on this account, the marketing of pure cotton was not profitable. The majority of speakers were against having recourse to legislative action as a check on such abuses as mixing until every other method of dealing with the problem has been carefully considered and examined. In the case of mixtures of Punjab-American and *desi*, the difficulty of computing the percentage of mixture was brought forward and emphasis was laid on the growing distrust of Punjab-American cotton in Bombay as a result of the mixing which was prevalent upcountry. The logical result of this mistrust was a lowering of the price offered for such cotton and a consequent loss to the grower. Finally it was agreed that no check on such malpractices could be established without general action by all the sections of the trade and, finally, the following resolutions were passed :—

Resolution 17.—" That in the opinion of the Central Cotton Committee, the mixing of pure American cotton is most undesirable and detrimental to the interests of all parties concerned. The Committee therefore resolve to appoint a Special Sub-Committee with instructions to report in July what steps they recommend should be taken to prevent mixing of pure American cotton with *desi*.

The Sub-Committee may at their discretion hold meetings in Bombay as well as in Karachi to suit the convenience of various members.

The Committee shall consist of five members to be appointed by the Indian Central Cotton Committee and three members to be appointed by the Karachi Joint Committee."

Resolution 19.—" In the opinion of the Central Cotton Committee it is important to take further steps for checking the malpractices of watering cotton, the mixing of cottons of different growths and the ginning and pressing of cotton in such a manner as to contain excessive quantities of seed. These malpractices eventually cause loss to the grower and economic loss to the country at large and they tend to stultify the work of the Agricultural Department. If on further investigation it is found that

adequate action by organised cotton trade associations is not feasible at the present juncture, the Committee consider that further legislative measures will be necessary."

15. At the 17th meeting of the Indian Central Cotton Committee (30th July 1928) a conference was arranged between the Punjab and Sind members of the Committee and the Local Sub-Committee to consider further the question of mixing of Punjab-American and *desi* cotton and to report to the full Committee. The findings of this conference were as follows :—

"On account of the peculiarities of the soil and the water supply the cotton grower in the Punjab must be allowed to grow different varieties of cotton.

The conference suggests that the Punjab Government should examine the question of mixing of *desi* and American cotton with a view to its prevention. In the meantime the attention of the International Federation of Master Cotton Spinners' and Manufacturers' Associations, the Bombay Millowners' Association, the Ahmedabad Millowners' Association and the Japan Cotton Spinners' Association should be drawn to the support given to mixing by their members buying mixed cotton. The members of these bodies should be requested to give encouragement by paying a full price when pure cotton is available.

The conference approves of the suggestion that the Director of Agriculture, Punjab, should issue from time to time reports indicating the purity and area of the American crop in the various districts.

The conference is doubtful whether the proposal that a testing house issuing certificates will go to the root of the evil, but recommends that every assistance should be given to the Director of Agriculture in regard to the same without any financial liability devolving on the Indian Central Cotton Committee.

After a very full discussion the conference decided that it is most desirable to fix the staple of Punjab-American cotton at 6/8″ minimum and no higher. It is also desirable that no cotton should be allowed to pass for deficiency in staple. The East India Cotton Association and the Karachi Joint Cotton Committee should be requested to embody a rule on these lines in their contracts."

16. To summarise the present position, the Punjab Government are now investigating the question of the mixture of Punjab-American and *desi* cottons with special reference to methods which might be adopted towards checking this abuse. The co-operation of trade Associations has been promised on any reasonable measures designed to check mixing, but doubt has been expressed whether the payment of a premium for pure cotton will, by itself, sufficiently counteract this growing evil. The Punjab Provincial Cotton Committee have agreed to test on a small scale, Mr. Milne's proposal for a testing house where Punjab-American cotton can be tested and thereafter sold on certificate of quality. Agreement has been arrived at between the East India Cotton Association and the Karachi Joint Cotton Committee with regard to the staple of the Punjab-American 4F contract. On receipt of the report awaited from the Punjab Government, the subject will be again discussed by the Indian Central Cotton Committee and further action on this important subject will be decided upon.

Supplementary Note.

The Director of Agriculture, Punjab, was addressed with regard to the increased percentage of mixture of *desi* with Punjab-American cotton *growing in the fields* as shown in the two reports submitted, one in 1925 and the other in 1928-29. The figures can be seen in Appendix (1) of my original note on this subject and show that a very definite increase in the percentage of admixture of *desi* cotton *in the fields* has taken place during the past four years.

The following reply has been received from the Director of Agriculture, Punjab :—

Copy of letter No. 322-S, dated 4th July 1929, from the Director of Agriculture, Punjab, to the Secretary, Indian Central Cotton Committee, Bombay.

"With reference to your letter No. 4512, dated 6th June 1929, I have the honour to say that the increase in the mixtures of cottons growing in fields seems to be due mainly to the mixing which takes place in ginneries.

2. We supply practically pure seed for about 1/5th of the crop and cottons multiply themselves about 20 fold per annum. Farmers do not as a rule, however, gin American cottons at their homes and consequently much of their seeds is bought from shop-keepers who in turn get it from ginneries. They thus run great risk of getting mixed seeds. To combat this danger I have for some time been pressing

Deputy Directors of Agriculture to induce farmers to gin small quantities of seed for sowing their crop in the following year, and a beginning has been made in this direction. If good progress can be made it would be a factor in keeping up the purity of different strains of cottons."

2. It will be seen that Mr. Milne ascribes the increase in the mixture of cottons growing in the fields to be largely due to *mixing in the ginneries* and the consequent sowing of mixed seed. The action taken to induce farmers to gin small quantities of seed for sowing their crop in the following year deserves every encouragement as, if such a practice can be widely developed and extended, it will certainly result in checking still further deterioration of the American crop.

APPENDIX XV.

SUBJECT 7.—*Cotton Ginning and Pressing Factories Act.*

Progress made in Indian States.

Secretary's Note.

At the last meeting of the Indian Central Cotton Committee (December 1928) it was reported that Mysore State had agreed to introduce legislation on the lines of the Cotton Ginning and Pressing Factories Act. The following resolution was passed :—

Resolution 13.—"The Central Cotton Committee note with great satisfaction that steps are being taken by the Mysore Government to introduce an Act into the State on the lines of the Cotton Ginning and Pressing Factories Act of British India."

Information has now been received from Dr. Coleman, Director of Agriculture, Mysore, that the final reading of the Mysore State Cotton Ginning and Pressing Factories Bill will take place in the ensuing session of the Mysore Legislative Council, commencing from the 24th June 1929.

Dr. Coleman will possibly be able to furnish the Committee with further information with regard to the progress of the Bill through the Legislative Council. No other Indian State has introduced legislation on the lines of the Cotton Ginning and Pressing Factories Act since the last meeting of the Committee.

2. Steady progress has been made in the compilation and publication of press returns from Indian States. In 1926-27, press returns were furnished from only seven Indian States, in 1927-28 from 21, while during the season 1928-29, 31 States* are furnishing press returns all of which are published in the Indian Trade Journal.

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*Hyderabad

Baroda.

Punjab States—
Nabha.
Faridkot.
Jind.

Rajputana States—
Jaipur.
Jodhpur.
Alwar.
Tonk.
Jhalawar.

Central India States—
Indore.
Bhopal.
Barwani.
Ratlam.
Jhabua.

Bombay States—
Alipura.
Rajpipla.
Nawanagar.
Chhota Udepur.
Savanur.
Idar.
Porbandar.
Cambay.
Mudhol.
Dhrangadhra.
Bhavnagar.
Gondal.
Wankaner.
Jamkhandi.
Wadhwan.
Limbdi.

APPENDIX XVI.

SUBJECT 7.—*Cotton Ginning and Pressing Factories Act.*

Cotton Ginning and Pressing Factories Sub-Committee—Summary of Proceedings.

1. At the last meeting of the Indian Central Cotton Committee (December 1928) the Cotton Ginning and Pressing Factories Sub-Committee was appointed as follows :—

Mr. S. D. Saklatvala, Sir Purshotamdas Thakurdas, Sir S. B. Mehta, Rao Saheb V. Krishna Menon and Messrs. Ellis Jones, Coleridge, Fotiadi, Vonesch, Lee, Taylor and Roberts. Since December Messrs. Ralli and Wilkinson have been appointed members in place of Messrs. Fotiadi and Taylor resigned.

2. Two meetings have been held since December, on March 11th and on May 14th, 1929. The principal subjects discussed were the amendment of Rule 7 under the Cotton Ginning and Pressing Factories Act (1925) and cotton ginning and pressing pools, on both of which separate notes have been prepared.

3. *Infringement in the marking of bales.*—During the past year, the East India Cotton Association reported eleven cases of faultily marked bales rejected in arbitration. Three cases were reported by a private firm and ten cases by the Chief Inspector of Factories, Bengal. In almost all these cases the infringement was of a minor character and reports were made to the authorities concerned and, whenever possible, warnings were issued to the press-owners.

A prosecution for infringement of the rules for marking of bales under the Cotton Ginning and Pressing Factories Act was launched against a press-owner in West Khandesh and a fine of Rs. 40 was imposed. The Director of Agriculture, Punjab, reported a case of a factory-owner being fined for failure to mark bales and maintain a ginning register.

4. *False packing and watering.*—Ten cases of cotton bales rejected for dampness and one case of a tender (Amritsar) rejected for false packing were reported by the East India Cotton Association. In each case, a certified copy of entry in the press register relating to the cotton under complaint was obtained and forwarded to the East India Cotton Association for posting. Five of the cases of bales rejected for dampness related to Broach cotton—four of these being from Baroda State and one from Viramgaon—three to Punjab cotton (Hapur, Kasur and Amritsar) and one each from Khamgaon and Ahmednagar. The International Federation of Master Cotton Spinners' and Manufacturers' Associations reported a complaint received from one of their constituents in Germany of careless ginning and packing of Sind cotton. The complaint was brought to the notice of the press-owners concerned and the Federation have been asked to forward the running numbers of the bales concerned in order to enable the press-owners to take the matter up with the ginners.

General.—At the request of the Sub-Committee, the Government of India, Commerce Department, drew the attention of all Local Governments and of Indian States to the faulty marking of bales in the presses. Information is received that the Baroda and Hyderabad Durbars have issued instructions to inspecting authorities to see that the requirements of the Cotton Ginning and Pressing Factories Act in this respect are being observed in all presses throughout these States. In reply to a reference from the Director General of Commercial Intelligence and Statistics regarding the usefulness of continuing the publication of monthly statistics of cotton pressed in each trade block expressed in bales of 400 lbs., the Sub-Committee replied that these statistics had been found of value to Directors of Agriculture and other officers in checking forecasts and that their publication should therefore be continued.

APPENDIX XVII.

SUBJECT 17.—*Local Sub-Committee—Summary of Proceedings.*

Since last December, Mr. Fotiadi resigned and his place was taken by Mr. T. G. Ralli, his successor on the Committee. Sir S. B. Mehta was appointed an additional member of the Sub-Committee by special resolution, passed at the 49th meeting.

During the half-year, four meetings, 47th, 48th, 49th and 50th of the Local Sub-Committee were held.

2. The 47th meeting was convened on 12th December 1928 for the sole purpose of considering the draft rules under the Bombay Districts Cotton Markets Act, submitted by the Director. The discussions of the Sub-Committee were forwarded to the Director of Agriculture, Bombay.

3. The Sub-Committee considered references from the Empire Cotton Growing Corporation and the Federation of Master Cotton Spinners' Associations, Ltd., Manchester, regarding improving the grades of Indian cotton and extending its use abroad. This subject is more fully discussed under subject 9 of the agenda of this meeting.

4. A reference was received from the Khamgaon Factory-owners' Association, Central Provinces, requesting the Committee to support their requests to Government for representation on the Indian Central Cotton Committee. The Sub-Committee decided that no case had been made out for acceding to the Association's request and that it was not prepared to recommend any addition to the Committee's membership.

5. A reference was considered from the Collector of Bombay requesting the opinion of the Committee with regard to the application of the Rules framed by the Bombay Government for the certification of weights and scales in cotton ginning and pressing factories to Sind. The Sub-Committee decided that they saw no reason to change their previous opinion that the notification in this respect should apply to Sind as well as to the Presidency proper but they agreed that, as regards Sind, the notification should be based upon the weights already in common use there. A further reference was received asking the Sub-Committee to reconsider the question in view of certain objections to the application of the Rules to Sind brought forward by the Chief Inspector of Factories, Bombay Presidency. The chief objections were (*a*) that the enforcement of the Rules in Sind would afford no protection to the actual cultivator as by far the bulk of cotton sales in Sind are made in the villages and not in the markets and (*b*) that the application of the Rules to Sind would entail much additional work on the officers of the Factory Department to the detriment of their more important duties of factory inspection. The Sub-Committee decided to ascertain the opinion of the Karachi Joint Cotton Committee and the Divisional Cotton Committee, Sind, on this subject before coming to any final decision.

6. The Sub-Committee considered a note by the Secretary on the Egyptian Scheme of Loans on security of cotton to assist the small producer. It was decided that this subject, in view of its possible interest to India, should be brought on the agenda of the next full meeting of the Committee (Subject No. 16 on agenda of full meeting).

7. The Sub-Committee decided not to support a request made to Government of India by the Buyers' and Shippers' Chamber, Karachi, for representation on the Indian Central Cotton Committee for reasons which had been previously brought to the notice of the Chamber.

8. The Director of Agriculture, Bombay, asked the advice of the Sub-Committee as to whether he should continue to give licenses under the Cotton Transport Act for the transport of half-pressed bales of cotton from Navapur (West Khandesh) into the protected areas of Surat and Baroda. The licenses had been applied for on account of the existence of a "pool" of press-owners at Navapur, where pressing charges had been forced up to Rs. 7-12-0 per bale. The Sub-Committee agreed to advise the Director of Agriculture, Bombay Presidency, that he should not grant such licenses in future unless he could satisfy himself that the pressing will be inspected and supervised officially and that the pressed bales would be marked clearly as "Navapur" cotton.*

9. The Sub-Committee considered a complaint of excessive watering in Hubli and Gadag Cottons brought to its notice by the *Vice*-President. It was decided to invite the attention of the Director of Agriculture, Bombay Presidency, to the matter and to request him to submit his observations for discussion at the July meeting of the full Committee. [Subject 7 (*d*)].

10. A reference from the Government of Bombay with regard to the re-imposition of road transport restrictions in the protected areas of the Surat district under the Cotton Transport Act is dealt with fully under subject 6 I (*a*) on the agenda of the full Committee.

11. Mr. Coleridge placed before the Sub-Committee a complaint from Karachi regarding steady deterioration of the Sind "desi" cotton crop during the past few years. It was decided that the Director of Agriculture, Bombay, should be written to and asked for his observations in this connection.

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*A further communication from the Director of Agriculture, Bombay Presidency, was received stating that as he could not arrange for the supervision and inspection suggested by the Sub-Committee, he had decided to discontinue the issue of licenses.

APPENDIX XVIII.

SUBJECT 6.—*Cotton Transport Act—Madras.*

Secretary's Note.

(1) At the 17th Meeting of the Indian Central Cotton Committee, note was taken of the action of the Madras Government in amalgamating the Tinnevelly and Tiruppur-Cambodia areas in the South and thus reducing the number of protected areas to two, *viz.*, the Northerns and Westerns and the Southern.

The following resolution was passed by the Committee :—

Resolution 5.—"The Indian Central Cotton Committee note with regret that the Madras Government have decided to reduce the protected areas in the Presidency under the Cotton Transport Act instead of increasing them as recommended by the Committee at their 13th meeting. The Committee hope, however, that the Madras Government will reconsider their decision if, after a trial of the enlarged zone, it is found that the work of introducing improved and better paying varieties of cotton by the Agricultural Department is being unduly hampered or jeopardised."

(2) At the 18th Meeting of the Indian Central Cotton Committee (11th and 12th December 1928), the Director of Agriculture, Madras, expressed the hope that the experience of one or two years' working would result in a reconsideration of this question.

The notification and rules as revised to give effect to the changes abovementioned were passed by the Madras Legislative Council on the 8th September 1928 and came into effect from the 19th September 1928.

APPENDIX XIX.

SUBJECT 6.—*Cotton Transport Act—Central Provinces.*

Secretary's Note.

(1) At the last meeting of the Committee (11-12th December 1928) the Director of Agriculture, Central Provinces, stated that he had drafted a notification under section 3 of the Cotton Transport Act, 1923, which was under the consideration of the Central Provinces Government. This notification was based upon similar notifications issued in Bombay and Madras.

(2) The following letter and Note have now been received from the Central Provinces Government :—

Copy of letter No. 445/27-XIV, dated the 14th June 1929, from the Under Secretary to Government, Central Provinces, to the Secretary, Indian Central Cotton Committee, Bombay.

Application of Cotton Transport Act to the Central Provinces and Berar.

In continuation of this department's letter No. 588/325-XIV, dated the 11th June 1929, on the above subject, I am directed by the Governor in Council to forward a copy of a note regarding the application of Cotton Transport Act to certain areas in Central Provinces and Berar and of the draft notification together with the Schedules referred to therein, and to request that you will be good enough to favour this Government with your opinion as to whether they meet with the requirements of the Committee.

I am to add that these papers are being placed before a joint meeting of the Board of Agriculture and of the Provincial Cotton Committee to be held in July next in order to ascertain their views.

Note submitted for the $\frac{\text{Provincial Cotton Committee}}{\text{Board of Agriculture}}$ regarding the application of Cotton Transport Act to certain areas in Central Provinces and Berar.

On the recommendation of the Indian Central Cotton Committee legislation was undertaken by the Government of India to prevent the transport of short staple cotton and cotton waste in order to avoid admixture with long staple cotton.

The Cotton Transport Act which was passed into law in 1923 was applied to Berar in that very year. The Central Provinces Provincial Cotton Committee recommended that two areas shown below should be notified under the Act :—

(1) One comprising of Buldana, Akola and Amraoti districts and railway stations in these districts ;

(2) the second comprising Yeotmal, Chanda, Wardha and Nagpur districts and railway stations in those districts.

It also recommended that rules should be framed under section 7 (1) (c) of the Act to prevent the importation of Khandesh Cotton into Berar by road except under license, which should also provide that cotton from Central Provinces area should be allowed to pass into Berar by road without restriction but not from Berar into Central Provinces except under a license. The Indian Central Cotton Committee supported the above recommendation and added Chhindwara, Seoni and Bhandara to the second area for the following reasons :—

(1) that much of the cotton from these districts was already sold as Central Provinces Cotton, and

(2) that the names of the districts were not mentioned in the Bombay classification probably because there were no pressing factories there.

The Commissioners, Nagpur and Berar, were asked to give wide publicity to the recommendations of the Central Provinces Provincial Cotton Committee, and to obtain and submit with their recommendations the opinions of cultivators and traders and to suggest rules under section 7 of the Act. The Commissioner, Nagpur Division, opposed the notification of Yeotmal, Chanda, Wardha and Nagpur under the Act as proposed above on the ground that neither disparity in price nor the quantity of foreign cotton imported for fraudulent purposes appeared to warrant the step and suggested no rules for this reason. The Commissioner, Berar, was of opinion that the restriction of transport by road seemed to be quite impracticable and recommended restriction of transport by rail only.

In 1925 it was decided that before taking action in the case a further enquiry should be made to show :—

(1) whether Khandesh and Berar Cotton were tending to a sufficiently great extent to the same price level to make it unnecessary to protect West Berar, and

(2) whether in practice there was a large volume of Khandesh cotton being imported into the markets of West Berar.

Accordingly the Deputy Commissioner, Buldana, who was asked, reported that it was presumed that Khandesh cotton was brought intoKhamgaon and mixed with Berar cotton and sent eastward, and it paid to transport such mixed cotton eastward. It was also recommended that the import into Berar of inferior cotton from Khandesh or any other tract producing inferior cotton and the export of cotton from Berar in an easterly direction by rail should be prohibited.

The Economic Botanist who was also consulted was of the opinion that the prices of Khandesh and Berar cotton approximated to a certain extent and furnished an argument not to protect the import of Khandesh cotton into Berar. The Director of Agriculture also agreed with the above view. The question was taken up again in 1926 and after examining the situation in consultation with the Commissioner, Berar, it was decided not to take any action in the matter. The Indian Central Cotton Committee however recommended again in 1928 the application of the Cotton Transport Act to one single area comprising Buldana, Akola, Amraoti, Yeotmal, Chanda, Wardha and Nagpur so as to prohibit import by rail from Khandesh and Central India, and this recommendation is supported by the Director of Agriculture.

This is the Committee's minimum request, which is made to satisfy the East India Cotton Association which declared Malkapur as an Oomra station for contract purposes in the expectation that the Cotton Transport Act would be applied to prohibit import of cotton from Khandesh and Central India. The Indian Cotton Committee emphasises that unless the local Government meet them half way in this matter, the declaration regarding Malkapur may be withdrawn. The Director of Agriculture is of opinion that the Association might go more further and cease to classify stations even further east of Malkapur as Oomra stations. The advantage of Malkapur being accepted as an Oomra station is that the local producers and dealers get a higher rate for their cotton on the strength of its repute that it is really Berar cotton and not Khandesh.

Statistics on record are not sufficient to prove how much cotton is imported into Malkapur by rail, although the import is inconsiderable as compared with the import by road. In the current cotton season up to the end of December 1928, 5,337 carts had been imported into Berar from Khandesh. The Cotton Committee's estimate of Khandesh cotton pressed at Malkapur last season is 10,000 bales and the inference from the figures available clearly is that the bulk of Khandesh cotton which comes to Malkapur is imported by road. The practical effect of applying the Act is to secure prohibition of import by rail only of Khandesh and Central India cotton. That is all that the Indian Cotton Committee ask for at this stage, and Government is not called upon to give any undertaking now to adopt prohibition of import by road in the future.

The Indian Cotton Committee has some claim for consideration in view of its support of cotton research work in the province. The Director of Agriculture has accordingly

submitted a draft notification for the prohibition of import of cotton on the lines suggested by the Indian Cotton Committee. Before effect can be given to such a notification, it has to be approved by the Legislative Council. It is desired now to obtain the view of producers and the trade on the proposal.

Notification.

Notification under section 3 of the Cotton Transport Act, 1923 (III of 1923), as amended by Act No. XXXIV of 1925.

Whereas it is necessary for the purpose of maintaining the quality and reputation of the cotton grown in the areas of the Central Provinces and Berar mentioned in Schedule I hereto appended.

Now therefore, in exercise of the powers conferred by sub-clause (1) of section 3 of the Cotton Transport Act, 1923 (III of 1923), as amended by Act No. XXXIV of 1925, the Government of Central Provinces is hereby pleased to prohibit the import of cotton (kapas, ginned cotton or cotton waste) into the said areas by rail save under and in accordance with the conditions of a license prescribed in this behalf.

2. The Government of Central Provinces are further pleased to prohibit under sub-section (2) of section 3 of the said Act the delivery to, and the taking of delivery by any person at any railway station specified in Schedule II hereto appended*, of any cotton when such cotton has been consigned from a railway station not situated in the said areas unless such person holds the prescribed license for the import of cotton into the said area.

Schedule No. I.

Protected area in the Central Provinces and Berar.

The area comprised in the civil districts of Buldana, Akola, Amraoti, Yeotmal, Chanda, Wardha, Nagpur, Chhindwara, Seoni and Bhandara.

The notification is also printed as a foot-note on page 14 of the Minutes of the 18th Meeting, Indian Central Committee (11/12th December 1928).

(3) The first resolutions on the application of the Cotton Transport Act to the Central Provinces and Berar were passed at the 6th Meeting of the Indian Central Cotton Committee (September 1923) and were as under:—

Resolution 26.—"That the Central Cotton Committee approves of the recommendation of the Central Provinces Cotton Committee that two areas should be notified as soon as possible in the Central Provinces and Berar.

The Berar area might consist approximately of the Buldana, Akola and Amraoti districts.

The Central Provinces area proper might consist approximately of the Yeotmal, Chanda, Wardha, Nagpur, Chhindwara, Seoni and Bhandara districts."

The proposal was examined, as stated in the above Note, by the Central Provinces Government and it was decided that no action should be taken.

At the 14th Meeting of the Committee (24/26th January 1927), the matter was re-discussed in view of the fact that several complaints had been received from the trade of the transport of cotton from Malkapur to Shegaon and the East India Cotton Association had expressed their willingness to make Malkapur a Berar station provided that inferior cotton from Khandesh and also from the borders of the Nizam's dominions could be kept out.

The Committee reaffirmed their previous resolution as under:—

Resolution 18.—"That the attention of the Government of the Central Provinces and Berar be drawn to Resolution 26 of the 6th Meeting of the Indian Central Cotton Committee, September 1923, and urge that early action be taken to give effect to it."

4. At the 15th Meeting of the Indian Central Cotton Committee (18/19th July 1927) a full discussion on the subject took place. Some details of the quantities of cotton railed from Malkapur to Shegaon and from Khandesh to Malkapur were submitted which showed that such movement was in no way insignificant. It was further pointed out that, over a series of years the prices of Berar cotton had ranged from Rs. 10 to Rs. 25 per kandy above Khandesh so that there was every reason for the movement of cotton by rail for fraudulent purposes. The Committee agreed that the suggestion to have only one protected area would simplify matters as the Cotton Transport Act could then be applied for the exclusion of cotton from Khandesh and Central India and would not divide the Provinces themselves. The East India Cotton Association had notified their agreement to classifying cotton from Malkapur as Berar cotton and not as Khandesh if the Cotton Transport Act came into force, thereby meeting applications received from the Malkapur merchants.

* See page 146.

The following resolution was passed :—

Resolution 4.—" That pending a further examination of the feasibility of constituting the Central Provinces and Berar cotton tracts described in Resolution 26 of the 6th meeting of the Central Cotton Committee as two protected areas under the Cotton Transport Act, the Central Cotton Committee urge the Central Provinces Government to notify under the Act a combined Central Provinces and Berar area consisting of the civil districts of Buldana, Akola, Amraoti, Yeotmal, Chanda, Wardha, Nagpur, Chhindwara, Seoni and Bhandara. The object of such notification is to prevent the importation of inferior Khandesh and Central India Cotton by rail, but steps should also be taken to regulate road transport on the Khandesh border as far as possible and in so far as is necessary to prevent the object of the Act being defeated."

5. The East India Cotton Association revised their schedule and made Malkapur a tenderable station for Oomras cotton and at the 16th Meeting of the Indian Central Cotton Committee (12/14th December 1927) this action was brought to the notice of the Central Provinces Government who were requested to consider the importance of an early notification of a combined Central Provinces and Berar area under the Cotton Transport Act.

6. At the 17th meeting of the Indian Central Cotton Committee (30/31st July 1928) the following resolution was passed :—

Resolution 6.—" The Central Cotton Committee again desire to impress on the Central Provinces Government the importance of the early application of the Cotton Transport Act to a combined Central Provinces and Berar area in order that inferior cotton be excluded from Khandesh and Central India. The Committee would also again draw the attention of the Central Provinces Government to the fact that the East India Cotton Association declared Malkapur as an Oomras station for hedge and delivery contracts in the hope that the Cotton Transport Act would be applied at an early date. There is a real danger of this concession being withdrawn if a pronouncement is not made soon, with the consequence that cotton growers of the District who use the market will suffer considerable loss."

Considerable discussion took place on the cost of enforcing restriction by road. The Committee were informed that in March 1927, 34,000 bales of cotton were pressed in Malkapur of which 10,000 bales were Khandesh cotton. If this was allowed to continue it was stated that the East India Cotton Association would require to take Malkapur off the list of stations under the Oomras contract if only to protect the Berar cotton growers. It was suggested that the Central Provinces Government should be asked to put on restrictions by rail only to begin with and that, at a later date, road restrictions might be considered. The Director of Agriculture, Central Provinces, said that in the draft form of the new regulations for the Berar markets, a record of the place from which the cart came was to be kept and this might be used to check the importation of inferior cotton to the markets by road.

7. The Central Provinces Government now request the opinion of the Committee as to whether the draft notification and the schedules referred to therein meet their requirements as to the application of the Cotton Transport Act in the Central Provinces and Berar. Restriction is on rail transport only and it is certain that, sooner or later, the question of further restriction on road transport also will have to be considered. However in view of the discussions which have taken place on this subject at previous meetings of the Committee, it would appear that the Notification meets with the minimum requirements of the Committee and would be a considerable advance in the interests of the Berar cotton growers.

SCHEDULE No. II.

All stations on the Bhusaval—Nagpur line from Kamkhed to Nagpur, both inclusive including the Khamgaon and Amraoti Branches.

All stations on the Murtajapur—Ellichpur line.
All stations on the Murtajapur—Yeotmal line.
All stations on the Pulgaon—Arvi line.
All stations in the Bhandara District between Nagpur and Gondia, both inclusive.
All stations on the Nagpur—Chhindwara line.
All stations on the Nagpur—Chanda line.
All stations on the Wardha—Ballarshah line.
All stations between Chhindwara—Nainpur in the Chhindwara and Seoni Districts.

APPENDIX XX.

SUBJECT 6.—*Cotton Transport Act, Hyderabad.*

Secretary's note.

1. At the 17th meeting of the Indian Central Cotton Committee (July 1928) a draft of the Hyderabad State Cotton Transport Bill, 133 Fasli, was brought to the notice of the Committee. The Bill was drawn up on the lines of the Act in British India and is meant to protect from admixture the long stapled Gaorani cotton grown in the greater part of Nander District, a small portion of the Adilabad District and part of the Bidar District or the areas which serve the Nander, Latur, Umri and Bhensa markets.

At the last meeting of the Committee (December 1928), in the absence of Mr. Collins no discussion on this subject took place, but it was reported that the Bill had not yet become law and that the Hyderabad State Cotton Transport Ordinance (considered at the 16th meeting of the Indian Central Cotton Committee—December 1927), would be extended to cover the interval.

2. The following letter has now been received from the Officiating Secretary to Government, Department of Commerce and Industry, His Exalted Highness the Nizam's Government, Hyderabad, Deccan :—

Copy of letter No. 6102, dated the 23rd April 1929, to the Secretary, Indian Central Cotton Committee, Bombay.

" With reference to your letter No. 3433, dated the 6th April 1929, I have the honour to say that the Hyderabad State Cotton Cultivation and Transport Act No. 6 of 1337 Fasli has been sanctioned and published in the *Government Gazette* and the rules under this Act have also been sanctioned by Government a copy * of which is sent herewith for your information."

3. The protected areas are defined in Schedule I, appended to the Rules under the Act. By the following notification, dated 13-8-38F, the protected area was extended to include Hadgaon Taluka :—

NOTIFICATION.

No. 6, dated 13/8/38F.

The Hyderabad Cotton Cultivation and Transport Act.

In continuation of the Notification No. 3 dated the $\frac{\text{5th January 1929}}{\text{3rd Isfandar 1338 Fasli}}$ it is hereby notified that under section 3 of the Hyderabad Cotton Cultivation and Transport Act No. 6 of 1337 Fasli, His Exalted Highness the Nizam's Government has been pleased to include the Hadgaon Taluk of Nanded District into the Protected Area.

There is no railway station in the Hadgaon Taluk, so no addition to the list of stations in the protected area is required.

THE HYDERABAD COTTON CULTIVATION AND TRANSPORT ACT.

No. 6 of 1337 Fasli.

(Received assent of His Exalted Highness the Nizam's on the 10th Bahman 1338 Fasli.)

Preamble. Whereas it is expedient for the purpose of maintaining the quality and reputation of cotton grown in certain areas in His Exalted Highness the Nizam's Dominions to prescribe restrictions regarding cultivation and transport of cotton and to control its import, it is hereby enacted as follows :—

Short Title, extent and date of commencement. (1) This Act may be called " The Hyderabad Cotton Cultivation and Transport Act " and will come into force in His Exalted Highness the Nizam's Dominions from the date of its publication in the Jarida.

Definitions. (2) In this Act, unless there is anything repugnant in the subject or context :—

(*a*) " Certified copy " in relation to a license means a copy of the license certified in the manner described in section 62 of the Hyderabad Evidence Act No. 2, 1313-F, by the authority by which the license was granted.

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* A copy of the Hyderabad Cotton Cultivation and Transport Act No. 6 of 1337 Fasli is attached together with a copy of the Rules under the Act.

(*b*) "Cotton" means every kind of unmanufactured cotton, that is to say, ginned and unginned cotton, cotton waste and cotton seed.

(*c*) "Cotton Waste" means droppings, strippings, fly and other waste products of a cotton-mill other than yarn waste.

(*d*) "License" means a license granted under this Act.

(*e*) "Notified Station" means a railway station specified in a notification issued under section 3.

(*f*) "Prescribed" means prescribed by rules made under this Act; and

(*g*) "Protected area" means an area in which the import of cotton or of any particular kind of cotton has been prohibited by a notification under section 3.

Power to issue notification prohibiting import of cotton into protected area.

(3) 1. The Government may, for the purpose of maintaining the quality and reputation of cotton grown in any area of His Exalted Highness The Nizam's Dominions, by notification prohibit the import of cotton or of any specified kind of cotton into that area, save under, and in accordance with the conditions of a license.

Provided that no such notification shall be deemed to prohibit the import into the protected area of cotton not exceeding five seers.

2. Any such notification may prohibit the delivery to, and the taking of delivery by, any person at any specified railway station situated in the protected area, of any cotton the import of which into that area is prohibited, when such cotton has been consigned from a railway station not situated in that area, unless such person holds a license for the import of the cotton into that area.

Refusal to carry unlicensed cotton.

(4) 1. Notwithstanding anything contained in the Hyderabad Railway Act No. 3 of 1334 Fasli or any other law for the time being in force the Station Master of any Railway Station or Railway servant responsible for the booking of goods or parcels at that Station may refuse to receive for carriage at, or to forward or allow to be carried on the railway from, that Station any cotton consigned to a station notified under this Act or the British Indian Act or any Act in force in any Indian State being cotton of a kind of which the delivery at such notified station has been prohibited unless both stations are in the same protected area, or unless the consignor produces a certified copy of a license for the import of the cotton into the protected area in which such notified station is situated.

2. Every certified copy of a license when so produced shall be attached to the invoice or way-bill as the case may be and shall accompany the consignment to its destination and shall then be dealt with in the prescribed manner.

3. Where, by or under any law in force in British India or in any Indian State, the import into any area of ginned or unginned cotton, cotton waste or cotton seed has been prohibited, His Exalted Highness the Nizam's Government may by notification declare that cotton grown in that area may subject to reasonable conditions be imported by road or rail into any protected area in His Exalted Highness the Nizam's Dominions.

Procedure where cotton arrives at notified station.

(5) Where any cotton, the import of which into any protected area has been prohibited, arrives at a notified station in any such protected area, the Station Master or other railway servant responsible for the receipt or delivery to the consignee of goods or parcels, as the case may be, at that station, shall unless both the notified stations and the Railway Station from which the cotton has been consigned are situated in the same protected area, refuse to deliver the cotton until he is satisfied that the consignee holds a license for the import of cotton into the protected area in which such notified station is situated and, if he is not so satisfied or if within fourteen days the consignee or some person acting on his behalf does not appear in order to take delivery, shall return the cotton to the Railway Station from which it was consigned together with an intimation that delivery of the cotton has been refused or has not been taken, as the case may be.

2. Any Station Master or other Railway servant receiving any cotton returned with the aforementioned intimation from a Railway Station specified in a notification under sub-section (3) of section 4, or returned under sub-section (1) shall cause to be served on the consignor a notice stating that the cotton has been so returned and requiring a consignor to pay any terminal or other charge due in respect of the carriage of cotton to and from the Railway Station to which it was consigned, and such charges shall be deemed to be as due from the consignor for the purposes of section (25) of the Hyderabad Railway Act No. 3 of 1334 Fasli.

Growing of cotton of a specified type in the protected area.

(6) 1. In any area regarding which a notification under section (3) has been issued, His Exalted Highness the Nizam's Government may by notification order that only cotton of a specified type shall be grown.

2. After the issue of the notification under sub-section (1) regarding any area, any person growing any other type of cotton shall, on complaint authorised by the Director of Agriculture before any Magistrate of First Class be liable on conviction to a fine which may extend to Rs. 50 (Rupees fifty) and the forfeiture of the cotton grown.

3. In every village situated in such area, Government shall before the season of sowing offer to supply seed of the specified type at a rate approved by the Director General of the Agriculture Department each year which shall not be higher than the market rate.

Penalties.

(7) Any person, who in contravention of the provisions of this Act, or of any notification or rule made hereunder, knowingly takes delivery of any cotton from a notified Station or imports or attempts to import, any cotton into a protected area, and any Station Master or other railway servant, who in contravention of the provisions of sub-section (*1*) of section 5, without reasonable excuse, the burden of proving which shall lie upon him, delivers any cotton to a consignee or other person, shall be liable to a fine not exceeding one thousand rupees, and upon any subsequent conviction to imprisonment which may extend to three months or to a fine which may extend to five thousand rupees or to both.

Power to make rules.

(8) 1. The Government may, by notification, make rules to provide for any of the following matters :—

(*a*) The prevention of the import into a protected area, save under and in accordance with the conditions of a license of cotton the import of which into that area has been prohibited by a notification under section 3 ;

(*b*) The terms and conditions to be contained in licenses and the authorities by which they may be granted ; and

(*c*) The manner in which licenses and certified copies thereof shall be dealt with on and after the delivery of the cotton to which they relate.

2. Any such rules may provide that any contravention thereof or of the conditions of any license, not otherwise made punishable by this Act, shall be punishable with fine which may extend to five hundred rupees.

Protection for acts done under this Act.

(9) No suit or other legal proceeding shall be instituted against any person in respect of anything which is in good faith done or intended to be done under this Act.

RULES UNDER THE HYDERABAD STATE COTTON CULTIVATION AND TRANSPORT ACT NO. 6 OF 1337 FASLI.

In exercise of the powers conferred by section 8 of the Hyderabad State Cotton Cultivation and Transport Act No. 6 of 1337 Fasli, the Government of His Exalted Highness the Nizam is pleased to make the following rules to carry out the purposes of the said Act, namely :—

1.(*i*)*Licensing authority : Form of application for a license.*—(*i*) Licenses for the import of cotton into the protected areas will be granted by the Director General of Commerce, Industries and Agriculture, Hyderabad State, and application shall be made to that officer in Form "A" annexed to these rules.

(*ii*) The Director General may by notification in the Jarida delegate all or any of his powers under sub-section (*i*) of this rule to any officer of the Agriculture Department not being below the rank of Deputy Director and thereafter applications shall be made to that officer but an appeal against any refusal to grant a license shall lie to the Director General.

2. No cotton of which the import has been prohibited by or under section 3 of the Hyderabad State Cotton Cultivation and Transport Act No. 6 of 1337 Fasli shall be imported into a prohibited area by road, or river save under and in accordance with the conditions of a license issued as provided by these rules.

3. *Licenses for import of cotton for manufacture.*—(1) Annual licenses for import by rail shall be granted to manufacturing concerns situated within protected areas for the importation of cotton or of any specified kind of cotton from outside such area for manufacture only. Such licenses shall be in Form "B" hereto annexed and shall be subject to the conditions stated therein.

(2) A certified copy of such licenses shall be tendered in Form "C" hereto annexed with each consignment at the despatching station and shall accompany the railway invoice to the station of delivery and shall then be forwarded by the railway authority concerned to the railway audit office for return to the Director General of Commerce, Industry and Agriculture, Hyderabad.

(3) The License shall be returned to the licensing authority at the expiration of the period for which it is granted together with all unused certified copies of the same.

4. *License for particular consignment by rail.*—(1) A single license to cover only one consignment may be granted to such persons as can satisfy the licensing authority that it is necessary to import cotton or any specified kind of cotton (that is, cotton seed, unginned cotton, ginned cotton or cotton waste) into the protected area. Such licenses shall be in Form "D" hereto annexed and shall be subject to the conditions stated therein.

(2) Such license shall be surrendered at the station of delivery to the Station Master or other prescribed officer at the time of taking delivery of the cotton covered by the license, who shall forward it to the licensing authority.

(3) A certified copy of such license shall be tendered in Form "E" hereto annexed with each consignment at the despatching station and shall accompany the railway invoice to the station of delivery and shall then be forwarded by the railway authority concerned to the railway audit office for return to the Director General of Commerce, Industry and Agriculture, Hyderabad.

5. *License for particular consignment by road or river.*—(1) A single license to cover only one consignment may be granted to such persons as can satisfy the licensing authority that it is necessary to import cotton or any specified kind of cotton (that is cotton seed, unginned cotton, ginned cotton or cotton waste) by road or river into the protected area. Such licenses shall be given in Form "F" annexed and shall be subject to the conditions stated therein.

(2) Such license shall be delivered at the "Naka", "Ghat" or other places specified by the licensing authority to the office mentioned in the license who shall forward it to the licensing authority.

6. *Separate licenses to be issued for different kinds of cotton.*—Separate licenses may be issued for different kinds of cotton, that is to say, for ginned-cotton, cotton seed, unginned cotton (kapas) and cotton waste.

7. *Penalty.*—Any contravention of these rules or the conditions of any license, not otherwise punishable under the said Act, shall be punishable on conviction by a Magistrate with fine which may extend to five hundred rupees.

NOTIFICATION.

Whereas it is necessary for the purpose of maintaining the quality and reputation of the cotton grown in the areas in the Hyderabad State mentioned in schedule I hereto appended.

Now, therefore, in exercise of the powers conferred by sub-section (*i*) of section III of the Hyderabad State Cotton Cultivation and Transport Act No. 6 of 1337 Fasli, His Exalted Highness the Nizam's Government is hereby pleased to prohibit the import of cotton into the said areas save under and in accordance with th conditions of license presented in this behalf.

(2) The Government of His Exalted Highness the Nizam is further pleased under sub-section (2) of section III of the said Act to prohibit the delivery to and the taking of delivery, by any persons at any of the Railway Stations specified under schedule II hereto appended of any cotton when such cotton has been consigned from a railway station not situated in the said area unless such person holds the prescribed license for the import of cotton into the said areas.

SCHEDULE I.

Protected Areas.

North.—The southern boundary of Hadgaon Taluka of Nander District and the northern boundary of Nirmal Taluka of Adilabad District.

East.—The Eastern and southern boundaries of Nirmal Taluka and the eastern boundaries of Nander and Bidar districts.

South.—The southern boundaries of Bidar and Osmanabad districts.

West.—The Sholapur-Osmanabad road from the point where it enters the Hyderabad State until it enters the Barsi Taluka; thereafter the boundary of Barsi Taluka until it meets the Barsi-Mominabad road; thereafter the Barsi-Mominabad road until it meets the southern boundary of Bir District; thereafter the western and northern boundary of Mominabad Taluka until it meets the southern boundary of Parbhani District; thereafter the southern and eastern boundary of Parbhani District until it meets the western boundary of Nander and thence northward along the western boundary of Nander.

SCHEDULE II.

Railway stations included in the protected areas.

N. G. S. RAILWAY (M. G.).	BARSI LIGHT RAILWAY.
Limbgaon.	Latur.
Nanded.	Hangul.
Mugat.	Ousa Road.
Mudkhed.	Neoli.
Sivangaon.	Murad.
Umri.	Palsap.
Karkheli.	Thair.
Dharmabad.	Dhoki.
Basar.	Tadvale.

No. 6, dated 13-8-38 F.

NOTIFICATION.

In continuation of the Notification No. 3, dated the $\frac{\text{5th January 1929}}{\text{3rd Isfandar 1838 Fasli}}$, it is hereby notified that under section 3 of the Hyderabad Cotton Cultivation and Transport Act No. 6 of 1337 Fasli, His Exalted Highness the Nizam's Government has been pleased to include the Hadgaon Taluka of Nanded District into the Protected Area.

APPENDIX XXI.

SUBJECT 6.—*Cotton Transport Act—Gwalior.*

Secretary's Note.

(1) As a result of complaints about the importation of Mewar cotton into Central India stations having been brought to the notice of the Indian Central Cotton Committee, the whole question of the transport of cotton by rail in Central India States was considered by the Local Sub-Committee and a report was submitted to the Indian Central Cotton Committee at its 14th meeting (24th/26th January 1927).

The report included the following recommendations :—

"It is hoped that the work at the Indore Institute of Plant Industry will result in the introduction of improved types of cotton for the Central India tract, and it is certainly undesirable that the reputation of the present Central India cotton should be lowered by mixture with cotton from other areas. If action is to be taken to prevent such admixture, the States concerned will need to pass their own Cotton Transport Laws. The four States concerned are Gwalior, Indore, Rutlam and Jaora. The Gwalior Cotton Committee have already under consideration the improvement of the cotton in their Malwa tract and this matter might be referred to them. The 'Central India' cotton tract would have to be carefully defined, as part of Gwalior produces cotton of the Bengals type.

The Indore State similarly might be approached to ascertain whether they are willing to apply the Cotton Transport Act. The needs of the Indore mills will have to be considered as some of them import considerable quantity of kapas, but probably such import could be controlled by licenses. Rutlam and Jaora States are both contributing States to the Indore Institute of Plant Industry and are interested in cotton development, but their cotton areas are comparatively small and it might be best to ascertain whether Gwalior and Indore States are willing to take the matter up before approaching Jaora and Rutlam."

(2) Accordingly the Gwalior Durbar was addressed and it was suggested that consideration should be given to the introduction of the Cotton Transport Act in order to protect the areas producing superior cotton.

At the 15th meeting of the Indian Central Cotton Committee, 18th 19th July 1927, the Gwalior representative said that the importation of Rajputana Bengals cotton into the Gwalior Malvi tract had perhaps been overestimated but the question of checking this practice was before the Gwalior Cotton Committee.

On the 27th September 1927, the Committee was informed that the subject of a Cotton Transport Act in Gwalior had been discussed at the 3rd meeting of the Gwalior Cotton Committee when it was decided that, in the absence of sufficient reasons, the question of introducing the Cotton Transport Act should be postponed for some time. It was also decided that in the meantime, necessary inquiries be made as regards the urgency of the matter. On the 1st May 1929, the Administrative Officer, Department of Agriculture, and Agricultural Engineering, wrote that the Gwalior Cotton Committee would probably meet some time in the 1st week of June 1929 when the question of the Cotton Transport Act would again be submitted for their consideration. A request was also made that copies of the Cotton Transport Act enforced by States in Central India so far should be supplied.

The Gwalior Durbar was informed that, so far, no State in Central India had enforced legislation on the lines of the Cotton Transport Act but that the matter was under consideration by the Indore Durbar. Reference was also invited to the legislation in this connection which had been passed by the Baroda, Rajpipla and Hyderabad Durbars.

(3) The following reply has been received from the Administrative Officer, Gwalior State.

Copy of letter No. 2455, dated 16th May 1929, to the Secretary, Indian Central Cotton Committee, Bombay.

SUBJECT.—*Cotton Transport Act.*

In reply to your letter No. 3964, dated the 6th May 1929, I have to inform you that conditions in different parts of India extremely vary and therefore we have no concern with action taken by Hyderabad or Baroda States.

Situated as Gwalior is in Central India we are concerned with problems affecting territories adjoining Gwalior. So far as I know no strong case has been made out to restrict the importation of cotton in Central India States and the least so for Gwalior.

In the meantime we are awaiting the action of Indore in this connection and would like to see how far the local trade is profitted thereby.

The present position with regard to the introduction of a Cotton Transport Act in Indore State is reviewed under another subject on the agenda.

APPENDIX XXII.

SUBJECT 6.—*Cotton Transport Act—Chhota Udepur.*

Secretary's Note.

As reported at the 16th meeting of the Indian Central Cotton Committee (12th/14th December 1927) the Chhota Udepur State have introduced a Cotton Improvement Act, somewhat similar to that in force in Rajpipla. Under this Act, the importation of cotton, kapas, cotton seed or cotton waste into the State is forbidden except under license. This prohibition extends to transport both by road and by rail.

2. The following notification of the Government of India, Commerce Department, was issued on the 25th May 1929 :—

NOTIFICATION.

No. 157-C (10)—Whereas by a law in force in the territories of the Chhota Udepur State the import, except under license, by rail into the said State of cotton, other than cotton in transit through the said State on the Chhota Udepur Railway to a destination outside the State, has been prohibited ;

The Governor General in Council in exercise of the powers conferred by sub-section (*3*) of section 4 of the Cotton Transport Act, 1923 (III of 1923), is pleased to declare that the provisions of sub-section (*1*) of the said section shall apply in respect of any such cotton which is consigned to any railway station situated within the territories of the Chhota Udepur State as if such State and such station were respectively a protected area and a notified station and as if any license granted under the said law were a license granted under the said Act.

3. This notification, issued under section 4 (3)* of the Cotton Transport Act (III of 23), which extends to the whole of British India, secures the application of the provisions of the British India Act to the Chhota Udepur protected area.

APPENDIX XXIII.

SUBJECT 8.—*Cotton Marketing—*

The Hyderabad Agricultural Markets Bill.

A Bill to provide for the establishment and the better regulation of agricultural markets in His Exalted Highness the Nizam's Dominions.

Preamble.

Whereas it is expedient to provide for the establishment of recognised open markets for the purchase and sale of cotton and other agricultural produce in His Exalted Highness the Nizam's Dominions, and for the better regulation of such markets and for the currency to be used in all transactions in such markets. It is hereby enacted as follows :—

Short title.—1. This Act may be called the Hyderabad Agricultural Markets Act.

Extent.—2. This Act shall apply to the whole of His Exalted Highness the Nizam's Dominions.

Definitions.—3. In this Act, unless there is anything repugnant in the subject or context :—

Agricultural produce.—(*i*) "Agriculture produce" means the produce of any land not being cotton, which is declared by His Exalted Highness the Nizam's Government by a notification in the *Jarida* to be agricultural produce for the purpose of this Act.

Cotton.—(*ii*) "Cotton" includes ginned cotton, unginned cotton and cotton waste.

Market.—(*iii*) A "Market" means a market established under section 4.

Prescribed.—(*iv*) "Prescribed" means prescribed by rule or by-laws made under this Act.

Notification of an agricultural produce or cotton market.—4. (1) His Exalted Highness the Nizam's Government may by notification in the *Jarida* declare that any place shall be a market established under this Act either for agricultural produce or for cotton or for both.

(2) Every such notification shall define the limits of the markets so established and may for the purposes of this Act include within such limits such local areas the Government may prescribe.

For every market there shall be a market committee.

The Market Committee.—5. The market committee shall be constituted as prescribed and shall consist of not less than eight and not more than 16 members. Of these not less than half shall be persons elected by or nominated from among the growers of agricultural produce or cotton of such area as His Exalted Highness the Nizam's Government may prescribe. Not less than one-fourth shall be elected by the traders in the market in such manner as may be prescribed and the remainder shall be nominated by Government.

Rules.

6. (1) Government may, either generally or specially for any market or group of such market make rules consistent with this Act for the purpose of the management and regulation of such markets under this Act.

(2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for or regulate :—

(*i*) the election and nomination of members of the market committee, the number of members to be nominated or elected by each of the bodies in accordance with section 5, and the manner of nomination or election and the term of office of such members;

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* *Section 4 (3)*—Where by or under any law in force in the territories of any State in India the import into any area, or the delivery at any railway station, of cotton or of any kind of cotton has been prohibited, the Governor General in Council may, by notification in the *Gazette of India*, declare that the provisions of sub-section (*1*) shall apply in respect of cotton consigned to any such station as if such area and such station were respectively a protected area and a notified station, and as if any license granted under such law were a license granted under this Act.

(*ii*) the powers to be exercised by the market committee;

(*iii*) the filling of casual vacancies in the offices of members or in the office of chairman of the market committee;

(*iv*) the management of the market and the prescribing of fees by the market committee, and, subject to the provisions of this Act, the collection and disposal of such fees;

(*v*) the issue by the market committee of licenses to brokers, weighmen, measurers, surveyors and warehousemen and other persons using the market, the form in which, and the conditions under which such licenses shall be issued, and the fees to be charged for such licenses;

(*vi*) the place or places at which cotton or agricultural produce shall be weighed or measured, and the kind and description of the scales, weights and measures to be used at such place or places;

(*vii*) the periodical inspection, verification and correction of all scales, weights and measures in use in the market;

(*viii*) the trade allowances which may be made or received by any person in any transaction in a market.

(*ix*) the settlement by arbitration, against which there shall be no appeal, of all disputes between a buyer and seller of cotton or agricultural produce or their agents regarding the quality or weight of the cotton or agricultural produce, the price or rate to be paid, the allowances for wrappings, dirt or impurities or deductions for any cause;

(*x*) the prohibition of brokers from acting on behalf of both the buyer and seller in any transaction;

(*xi*) the manner in which the auctions shall be conducted and bids made and accepted in any market;

(*xii*) the provision of storage arrangements for cotton and agricultural produce;

(*xiii*) the preparation of plans and estimates for works proposed to be constructed partly or wholly at the expense of the market committee and the grant of sanction to such plans and estimates;

(*xiv*) the form in which the accounts of the market committee shall be kept, the manner in which they shall be audited, and the time or times at which they shall be published;

(*xv*) the preparation of an annual budget and its submission for sanction, and the reports and returns which shall be furnished by the market committee.

(*xvi*) the disposal of any surplus funds of the market committee.

3. Any such rules may, when necessary, provide that any contravention thereof or of any of the conditions of any license issued thereunder shall be punishable with fine which may extend to five hundred rupees.

By-Laws.

7. Subject to any rules made by Government under the last preceding section and with the previous sanction of such officer as the Government may designate in this behalf, the market committee may, in respect of the market under its management, make by-laws for the regulation of the business and the conditions of trading in such market and may provide that contravention thereof shall be punishable with fine which may extend to fifty rupees.

Sub-Committees and joint committees and delegation of powers.

8. The market committee may appoint one or more of its members to be a sub-committee or to be a joint committee for the conduct of any work or works or to report on any matter or matters, and may delegate to any one or more of its members such of its own powers as may be necessary.

Appointments and salaries of servants of the market committee.

9. (1) The market committee may employ such officers and servants as may be necessary for the management of the market and may pay such officers and servants such salaries as the committee thinks fit. The committee may, in the case of any officer or servant of Government which it employs, pay such pension contribution, gratuity or leave allowance as may be required by the regulations made by Government in this behalf and for the time being in force.

(2) The committee may also, in the case of any of its officers and servants, provide for the payment to them of such leave allowances, pensions or gratuities as it deems proper; and may contribute to any provident fund which may be established for the benefit of such officers and servants.

(3) The powers conferred by this section on the market committee shall be exercised subject to any rules which may be made in this behalf by the Government.

Contracts how executed.

10. (1) Every contract entered into by the market committee shall be in writing and shall be signed on behalf of the market committee by the chairman and two other members of the market committee.

(2) No contract other than a contract executed as provided in sub-section (*i*) shall be binding on a market committee.

Market Committee Fund.

11. All monies received by a market committee shall be paid into a fund to be called the "Market Committee Fund" and all expenditure made by the market committee under or for the purposes of this Act shall be defrayed out of the said fund. Any surplus remaining after such expenditure has been met shall be expended as may be prescribed in the rules made in this behalf.

Purposes for which the market committee fund may be expended.

12. Subject to the provisions of section 11 all fees collected by the market committee under this Act or the rules made thereunder shall be expended on :

(*i*) the maintenance and improvement of the market ;

(*ii*) the construction and repair of buildings which are necessary for the purposes of such market and for the health, convenience and safety of the persons using it ; and

(*iii*) the pay, pensions, leave allowances and pensions or provident fund contributions of the officers and servants employed by the market committee.

No trade allowance not recognised by custom or rules allowable.

13. (I) No trade allowance, other than an allowance prescribed by rules or by-laws made under this Act shall be made or received by any person in any transaction in a market established under this Act, and no Civil Court shall, in any suit or proceeding arising out of any transaction in any such market, have regard to any trade allowance not so prescribed.

Explanation.—Every deduction other than deductions on account of deviation from sample, when the purchase is made by reference to a known standard, or on account of difference between the actual weight of the sacking and the standard weight, or on account of the admixture of foreign matter, shall be regarded as a trade allowance for the purposes of this Act.

14. No person may work or be employed as a broker, weighman, measurer, surveyor or warehouseman within the limits of the market unless he is employed by the market committee or has received a license from it, and any person so doing shall be punished with fine which may extend to fifty rupees and should the offence be repeated to five hundred rupees for the first day and one hundred rupees for each day after the first during which the offence continues.

No private market to be opened in or near places declared to be markets.

15. Wherever His Exalted Highness The Nizam's Government has by a notification under section 4 declared any place to be a market, no person shall, within the area of such market and within a distance thereof to be notified in the *Jarida* in this behalf in each case by the Government, except with the sanction in writing of Government expressed over the signature of a Secretary to Government and subject to such conditions as may be imposed in such sanction, set up, establish or continue or allow to be continued any market for the purpose and sale of cotton or agricultural produce as the case may be.

Penalties.

16. Whoever in contravention of this Act, sets up, establishes, continues or allows to be continued any market for the purpose of the purchase and sale of cotton of agricultural produce or violates the conditions under which he has been allowed to set up, establish or continue, any such market, shall be punished with fine which may extend to Rs. 500, and, in case of a continuing breach of the provisions of section 15, with fine which may extend to Rs. 100 for each day after the first during which the breach continues.

Compulsory use of Osmania Sicca currency.

17. His Exalted Highness The Nizam's Government may by a notification in the *Jarida* prescribe that in any market in His Exalted Highness The Nizam's Dominions, whether notified under section 4 or not, bids for cotton or agricultural produce or payments for the same shall be only made and accepted in Osmania Sicca currency.

(2) Where a notification has been made under this section, any person who shall make or accept a bid or pay for any cotton or agricultural produce or receive payment for the

same in any other currency shall, on conviction before a magistrate of the first class, be punishable with fine which may extend to Rs. 100 or to 10 per cent. of the bid made or accepted or the amount paid or accepted, whichever is greater.

Offences to be triable only by First Class Magistrates.

18. (1) No offence under this Act or under any rule made under section 6 shall be triable by a magistrate other than a magistrate of the First Class.

(2) All fines and damages recovered from an offender shall be paid to the market committee.

(3) Prosecutions under this Act may be instituted by any person duly authorized in writing by the market committee or by some officer designated by Government in this behalf.

(Signed) G. A. MOHAMMADI,
Officiating Secretary.

APPENDIX XXIV.

SUBJECT 8.—*Cotton Marketing, Indore.*

Secretary's Note.

At the 18th meeting of the Indian Central Cotton Committee (December 1928), a most interesting note on the working of Cotton Markets in the Holkar State was submitted by Mr. Palairet and considered by the Committee.

The following resolution was passed :—

Resolution 10.—"The Central Cotton Committee note with satisfaction the success of the two regulated markets in the Holkar State and as there would seem to be a demand for such markets, the Committee would recommend that an Act on the lines of the Law and Rules thereunder in force in the Berar cotton markets be favourably considered by the Holkar Durbar."

In his note, Mr. Palairet stated that two cotton markets had been started, one at Sanawad and the other at Burwaha but that it was hoped that two additional markets, one at Khargone in Nimar and one at Tarana in Mahidpur district, would be started in time for the coming cotton season.

2. Mr. Palairet has informed me that the rules of the Holkar State cotton markets were based upon the Berar rules to start with and only where it was found necessary, they were altered to suit local conditions. He has under consideration a comparative statement on the working of the existent markets but does not anticipate that any alteration in the rules will be desirable. Probably Mr. Palairet may be able to give the Committee further information on the present position of organised cotton markets in the Holkar State and to indicate whether there is any prospect of an Act on the lines of the Berar or Bombay Cotton Markets Act being introduced into Indore State in the near future.

APPENDIX XXV.

SUBJECT 14.—*Finance of the Cotton Crop Up-country.*

Secretary's Note.

At the last meeting of the Indian Central Cotton Committee, reports of the Special Sub-Committee on cotton finance investigations carried out in 1927-28 were considered. These investigations concerned Sind, Middle Gujerat, Punjab, Madras (Northerns and Westerns tract) and Khandesh (2nd Inquiry). In addition, a General Report on all the eight investigations conducted by the Committee was presented.

The following resolutions were passed :—

Resolution 17.—"That the reports of the Special Sub-Committee on the Khandesh, Sind, Gujerat, Punjab and Madras Finance Enquiries be approved. The Committee wishes it to be understood that it has made recommendations only on those points with which it is chiefly concerned, and any others which act against the interests of the grower will, it hopes, receive sympathetic treatment from the Provincial Governments."

Resolution 18.—"The Central Cotton Committee desires to draw the attention of the Provincial Governments to the reports on the Finance and Marketing of the

cultivators' cotton and in the interests of the grower would specially emphasise the importance of the development of the co-operative movement both as regards finance and sale."

Resolution 19.—"The Central Cotton Committee approves of the printing of the Sind, Gujerat, Madras, Punjab and the General Reports. The report of the Sub-Committee on the Khandesh investigation should be printed as an addendum to the first Khandesh Enquiry."

2. The Sind, Middle Gujerat, Madras Reports and the General Report have been printed and distributed. The report of the Special Sub-Committee on the Khandesh (2nd Inquiry) Report has also been printed, as an addendum to the Khandesh (1st Inquiry), and distributed.

The report on the Punjab Inquiry has not yet been printed as it was decided at the last meeting of the Indian Central Cotton Committee that the publication of this Report should be delayed pending its examination by the Sub-Committee of the Board of Economic Inquiry, Punjab, appointed for that purpose. A Sub-Committee, consisting of Messrs. Townsend (Financial Commissioner, Revenue, Punjab), Roberts of Khanewal and Johnstone (Professor of Agriculture, Lyallpur) examined the Report but a difference of opinion arose on certain of the statements made and deductions drawn in the Report upon which a settlement could not be arrived at. The Board of Economic Inquiry therefore decided that the points under dispute should be referred to Mr. Calvert (Financial Commissioner, Development, Punjab, and President, Board of Economic Inquiry) and Mr. Johnstone who should go into the criticisms—put forward by Mr. Roberts—and come to a decision regarding them. Where fundamental objections were raised, Mr. Roberts' opinion should be added as a foot-note. The Board authorised the publication of the Report as soon as these objections had been settled in this way.

The Director of Agriculture, Punjab, may be able to furnish the Committee with further information in this connection.

3. As per the Resolutions of the Indian Central Cotton Committee quoted above, the Governments of Bombay and Madras have been addressed inviting attention to the Resolutions of the Committee and to the suggestions and recommendations of the Special Sub-Committee contained in the preface to the Reports. The attention of the Government of Bombay was specially directed towards the evidence obtained with regard to the general use of false weights and scales in the Sind villages under investigation.

4. As recommended by the Indian Central Cotton Committee in December last, the Governments of Bombay, Madras and the Central Provinces and Berar were addressed and asked if they would be prepared to undertake the work of having the Reports (with which they are concerned) translated into the main vernacular of the tracts where the inquiries were conducted. It was pointed out that, if this recommendation of the Committee was acceptable, the cost of printing the vernacular Reports would be borne by the Committee.

Replies from the local Governments in this connection are awaited.

APPENDIX XXVI.

SUBJECT 13.—*Fumigation of American cotton—Secretary's Report.*

Secretary's Note.

1. At the 17th meeting of the Indian Central Cotton Committee (30th-31st July 1928) a Resolution was passed recommending that the Government of India should sanction a *Refund* of eight annas per bale on American cotton fumigated between the 12th July 1927 and the 31st July 1928.

The recommendation of the Committee has been accepted by the Government of India and the refund has been disbursed by the Bombay Port Trust, as was done in the previous year. By order of the Government of India, claims for refund submitted after the 31st May 1929 were disallowed. The total disbursement of refund made amounted to Rs. 45,714-8-0 on 91,429 bales.

2. Since the 1st September 1928, the total number of bales fumigated up till May 31st 1929 amounts to only 7,910 bales. Receipts at Rs. 3-1-0 per bale amount to Rs. 24,224-6-0, while expenditure on fumigation totals approximately Rs. 28,000*. As expenditure during the period in question is in excess of receipts, no further refund can be recommended.

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* Actual figures for May not yet available.

APPENDIX XXVII.

SUBJECT 16.—*Egyptian Scheme of loans on security of cotton to assist the small producer.*

Secretary's Note.

1. In October last, Sir Purshotamdas Thakurdas forwarded a cutting from the *Pioneer* consisting of an interview with the Egyptian Premier on the policy of his Government. In the account of this interview, mention was made of a scheme for loans on the security of cotton designed to assist the small producer. Sir Purshotamdas Thakurdas requested the Secretary, Indian Central Cotton Committee, to obtain details of the scheme with a view to have it examined as regards its possible application to India.

2. Application was made to the Secretary, Ministry of Agriculture, Cairo, for particulars of the scheme and the following documents, relative to advances were received :—

(1) Communiqué of the President of the Cabinet (in Arabic).

(2) Agreement with the Banks (in French).

(3) Contract of advances (in French).

(4) General directions for obtaining advances on cotton (in Arabic).

(5) An Act for the realization of security in the contract of advances made by Government to cotton cultivators (in French.)

All these documents have been translated and copies of the translations are appended.

3. The scheme is designed to be worked by Government in co-operation with Banks. A nucleus fund of £ E. 15,000 is to be deposited by Government with each Bank for the purpose of making advances against cotton deposited by cultivators in approved godowns, compounds, etc. Banks will requisition daily from the National Bank the amount of advances approved on the previous day. The grower may, on depositing his cotton at any of the several places nominated by Government, including bank compounds, warehouses and approved ginning factories, obtain advances on a fixed scale according to the amount of cotton deposited, its variety and class. The limits of the amounts of cotton upon which advances can be obtained are, minimum 5 kantars (6 maunds) maximum 500 kantars (600 maunds). Interest at the rate of 4 per cent. per annum is required to be paid by cultivators taking advances, but all other charges, *e.g.*, storage, packing, weighing, protection, etc., are borne by Government. Advances are only granted to growers on their own crop and they are required to furnish a declaration to this effect previous to receiving a loan from a Bank. Each cultivator has to sign a contract form before receiving an advance. Advances are sanctioned for a period of four months with the option of extension for four more. The necessary staff, cashiers, agents, warehouse keepers, etc., are nominated by the Banks but paid by Government. Furthermore, the Banks furnish sacks, etc., at a reasonable cost to borrowers requiring these for the packing and storage of their cotton, the expense in this connection being also met by Government. It is interesting to note that the borrowers have to agree to Government taking charge of the ginning of all cotton deposited and to accept the classification of their cotton made at the place of deposit or ginning factory. The borrower further authorises Government to sell the seed at a price considered reasonable and *may* authorise Government further to effect the sale of his *cotton* after ginning in the Bourse of Minet el Bassal. In default of payment at maturity, of capital, interest and expenses which have been advanced by Government to borrowers, Government can proceed to sell the cotton deposited after 30 days' notification of sale; 1 per cent. will be recovered from the proceeds of such sales for the expenses incurred in realizing the security and, from the net price obtained, the advance, principal and interest outstanding, are deducted and the balance sent to the borrower.

Further details of the scheme are to be found in the attached papers.

4. The scheme was considered by the Local Sub-Committee at its 49th meeting, April 12, 1929, when it was decided that, in view of the great interest to India of such a scheme for financing cotton-growers, the details should be brought on the agenda of this meeting of the full Committee for discussion. In the interim, a further letter was sent to the Ministry of Agriculture, Egypt, thanking them for the valuable information supplied and asking to be favoured with any *report on the working* of the scheme in Egypt if such a publication was available.

The following reply was received :—

Copy of letter No. 6443/34-3-5, dated 28th May 1929, from the Under Secretary of State, Ministry of Agriculture, Cairo, to the Secretary, Indian Central Cotton Committee.

Translation :

"I have the honour to acknowledge receipt of your favour No. 3641 of the 18th April 1929 the contents of which, as of your letter No. 4149 of 17th May following, have received our best attention. In reply, I beg to bring to your notice that the project of granting advances on cotton to members of co-operative societies is at present under examination. As soon as a decision is arrived at, a further reference will be made."

5. In the original papers received in connection with this subject, no mention was made of advances being confined to "members of co-operative societies" and this point has been referred to the Ministry of Agriculture, Cairo, for further details. In view of the recent finance and marketing investigations on the cotton crop up-country, which have been carried out by the Indian Central Cotton Committee, the details of the Egyptian scheme are of great interest to the Committee and it is for consideration whether steps should be taken to bring the main features of the scheme to the notice of the Government of India and Provincial Governments. In addition, it is possible that Co-operative Institutes, Central Co-operative Banks and similar institutions interested in the finance and marketing of crops would find information dealing with a scheme of this description interesting and valuable.

(1) A COMMUNIQUÉ OF THE PRESIDENT OF THE CABINET.

With the view of preventing the accumulation of cotton in markets and co-ordinating supply and demand, Government hold that agriculturists should be paid advances for their cotton during the present cotton crop commencing from 1st September 1928 and propose that the time limit should be increased, so that a large number of agriculturists should find ample time to receive advances. Government is prepared to allot £ E. 4,000,000 (?) for this purpose and may increase the allotted amount to meet further demands if circumstances allow.

The Managers of the banks should adopt measures to establish the advance system. They should put these in force in towns and circles. Cotton should be stocked under the supervision of various banks, in cities, circles and public markets. Government in agreement with the banks of various circles and cities will establish central offices to facilitate transactions with villages. Government shall establish general godowns for the storage of cotton. The advance system should be made public and these godowns should be situated so that the agriculturists can have easy access to them.

Government assumes the responsibility of carrying out the system of advances with very little burden on the agriculturists as was done in 1926. Government hold that 4 per cent. per annum of interests should be levied on such advances of loan to agriculturists. The period of advance will extend to four months which can be renewed for another period of four months if required.

Government hold that the loan should be given to agriculturists who offer quantities of cotton weighing from 5 to 500 kantars. The Government will gin the cotton on which the advances have been made, within the period provided by the law, which should be adopted on the following basis :—

1. £ E. 5 for each kantar of Saklaridas cotton for Fully Good, Fair and other superior classes and £ E. 4/500 m/m for Good Fair.

2. £ E. 3/500 m/m for each kantar of Ashmooni cotton for Fully Good, Fair and other superior classes and £ E. 3 for Good Fair.

3. £ E. 4 for each kantar of other sorts of cotton for Fully Good, Fair and superior classes and £ E. 3/500 m/m for Good Fair.

The Finance Ministry will issue a proclamation with necessary directions to lay down the procedure of cotton advances. Government will be responsible for watching very carefully the tendencies of the market so that timely action may be taken in the event of abnormal developments of these transactions.

(2) AGREEMENT WITH THE BANKS.

Warehousing.—The Banks will take charge of the operations relating to advances in the towns and in the interior. The cotton will be deposited in the allakas, public markets, compounds of the Banks as well as in the warehouses and "*Zarbiahs*" which

will be established by Government in agreement with the Banks in a large number of areas within the limits of the " markaz " so that these places may be, as far as possible, within the reach of those who wish to take the advances. In order to put the project into immediate execution, cotton can be placed in any suitable place available.

2. As long as the compounds / warehouses of the Banks are used for warehousing cotton, Government will pay rent which ought to be fixed by previous arrangement with the interested banks.

3. Weighment will be carried out by public weighmen nominated and paid by Government.

4. Advances will also be sanctioned against cotton deposited in the ginning factories approved by the Minister of Finance, on production of certificates issued by these factories, giving the quantity of cotton, its variety and grade.

In cases where this concession is taken advantage of by the grower, Government will bear the cost of storage, weighing and grading which should be fixed as low as possible—in agreement with a Bank Committee and approved by the Finance Minister.

5. For each place selected for warehousing, there will be fixed the days of the week on which the grader, the cashier, the weighman and the person responsible for giving the advances will be present unless the number to be given in any place does not necessitate the continuance of the market.

6. Government will undertake to erect barriers round the Hallakas and markets for the protection of the cotton and will furnish a guard of police.

7. *Advances.*—Advances will be sanctioned on Government account and Government will supply the necessary funds. It will deposit with each Bank a sum of £ E. 15,000 as a nucleus. Each bank will requisition daily from the National Bank the amount of advances approved the previous day.

8. The borrower will pay interest at the rate of 4 per cent. per year to Government. Borrowers will bear no other charges during the storage of cotton in the depôts.

9. The division of Hallakas and Zarbiahs between the different banks will be settled on a plan which will be submitted to the Finance Minister for approval.

10. Advances will be sanctioned to growers on their own crop. Each borrower will furnish a declaration that his cotton satisfies this condition and the bank making the loan will content itself with the declaration and need not verify it nor the status of the borrower.

11. Banks can accept without prejudice cotton of the present year's crop or that of last year.

12. No advance will be sanctioned on quantities less than 5 kantars nor more than 500 kantars. Advances will be allotted on the following scale :—

For each kantar of Sakellaridis cotton.	£ E. 5 for Fully Good, Fair and other superior classes. £ E. 4/500 m/m for Good Fair.
For each kantar of Ashmouny cotton.	£ E. 3/500 m/m for Fully Good, Fair and other superior classes. £ E. 3/000 m/m for Good Fair.
For each kantar of cotton of intermediate varieties.	£ E. 4/000 m/m for Fully Good Fair and other superior classes. £ E. 3/600 m/m for Good Fair.

Advances can be made on fractions of a kantar at the rate of ½ kantar for a quantity not less than 50 " rotolis " and not more than 74 " rotolis " of the same variety and class and up to ¾ of a kantar when the fraction reaches 75 " rotolis " or more.

13. Each cultivator will be required to sign the contract for cotton advances (Form A) before receiving the advance. The exact date should be given to all contracts.

14. The advances will be sanctioned for a period of four months with the option of extending it for four more. The borrower can withdraw his cotton at any time provided he repays the loan *plus* interest according to the clauses in the contract (Form A).

15. Banks will nominate the necessary staff such as graders, cashiers, agents and warehouse-keepers and will provide the books and other necessary equipment. The cashiers will be guaranteed but they can commence work at once pending the completion of the necessary formalities regarding their guarantee. Notice must be given to the Finance Minister of the personnel engaged, with details of their functions, salaries, etc.

Government will bear the cost of the foregoing expenditure, it being understood that the banks will exercise constantly all the necessary control over the expenses which should not be more than would reasonably be disbursed in order to assure the proper carrying out of the scheme.

16. The bank will present weekly to the Finance Minister a statement showing the quantity of cotton on which advances have been sanctioned as well as the amount of advance.

17. The Bank will furnish to those borrowers who ask for them the necessary sacks at a reasonable price which the cultivators will pay. Depreciation and losses in the stock of sacks will be borne by Government. The cost of "Faquinage" and other petty expenditure will also be borne by Government.

18. Government will assume all responsibility so far as concerns the operations relating to advances and warehousing and for the new personnel engaged for the carrying out of the scheme; the banks will assume responsibility only for their own staff. Government reserves itself the right to delegate its inspectors to inspect all the operations relating to the project.

The Minister of Finance.

(3) CONTRACT OF ADVANCES.

Form A.

The undersigned .....of village .....Markaz .....Moudirieh .....requests from .....Bank, acting on behalf of the Egyptian Government, an advance of £ E. .....against the deposit of .....kantars of cotton, as detailed below, and declares that he accepts the conditions below :—

(1) The borrower accepts the classification which will be given to his cotton by the Bank Agents.

(2) The advances will be calculated on the following scale :—

(*a*) For each kantar of Sakellarides cotton.	£ E. 5/000 mill. for Fully Good Fair and other superior classes. £ E. 4/500 mill. for Good Fair.
(*b*) For each kantar of Ashmouni cotton.	£ E. 3/500 mill. for Fully Good Fair and other superior classes. £ E. 3/000 mill. for Good Fair.
(*c*) For each kantar of intermediate varieties of cotton.	£ E. 4/000 mill. for Fully Good, Fair and other superior classes. £ E. 3/500 mill. for Good Fair.

3. The advance is sanctioned for four months to count from the date of the present Act subject to renewal for four more months and subject to the borrower conforming to Art. 17.

This advance will carry interest at 4 per cent. per year to cover the necessary expenses to which reference is made in Art. 5 and which are being borne by Government.

The borrower agrees to the warehousing of his cotton after having taken it in sacks at his own expense, in the depot at .....Markaz .....Moudirieh ..... and agrees to it being moved, in case of need, to any other Zarbia, Chouna or place where Government decides to store it.

N. B.—In order to facilitate this, Government possesses in their depots a stock of sacks which will be sold at a reasonable price.

The price of these sacks can be adjusted when repaying the advance or paid in cash according to the wish of the borrower.

5. The Government will bear all charges for weighing, classifying, storing cotton at the time of its reception and during the period it lies at the depot.

6. The borrower agrees to accept the normal loss in weight which will arise during storage.

7. Government will bear the cost of watching the cotton.

8. The borrower agrees to Government taking charge of the ginning of the cotton taken on deposit and accepts the delay fixed by law or any other delay which may be fixed by the Minister for Agriculture without previous notice being given by Government.

9. The cost of transport of cotton from the Government depot to the ginneries as well as the cost of ginning, insurance, etc., will be borne by the borrower.

10. The borrower agrees to accept now the classification of his cotton which will be done at the ginning factory and the Government is not responsible for any difference that may exist between this classification and that made in the first place.

11. In the event of the cotton being sold, the classification made at that time will alone be taken into consideration.

12. The cotton of all borrowers possessing 50 kantars or more of the same variety and class will be ginned separately to form one lot.

13. The cotton of each borrower possessing less than 50 kantars of the same variety and of the same class will be ginned with the cotton of other borrowers possessing less than 50 kantars of the same variety and class and the expenses referred to in Art. 9 will be born by borrowers *pro rata*.

14. The borrower now authorises Government to sell the seed. Government will fix the date and place of sale as well as the price that it considers reasonable.

15. The borrower can, at any moment during the time of the loan, withdraw his cotton before or after ginning provided he pays the advance and other expenses incurred up to the day of withdrawal unless the quantity of cotton is less than 50 kantars in which case he cannot withdraw it before ginning.

16. The borrower can authorize Government to effect the sale of his cotton after ginning, in the Bourse of Minet el Bassal, on the conditions there in force and according to the conditions stipulated in Art. 18.

17. At the expiry of the period of four months the borrower may extend the period for four more months, provided he pays the expenses due.

18. If the cotton of any borrower has been ginned with the cotton of others according to Art. 13 above, the advance will be considered as having expired at the same time as others and Government will have the right, from the date of ginning, to sell the cotton ginned with that of other borrowers. Moreover, Government will consider itself authorized from this date to effect this sale on the date and place that it may choose and at a price which it considers reasonable on condition always that Government advises the borrower eight days in advance the date and place of sale.

19. All cotton ginned will be warehoused either up-country or at Alexandria according to the decision of the Finance Minister and the cost of transport, storage, insurance, etc., will be borne by the borrower.

20. The cotton deposited is as follows :—

		Amount of advance.			
		Kantars.	Rot.	£ E.	M.
Cotton Sakellarides	.. F. G. F.	..	..	..	..
,, ,,	.. G. F.	..	..	..	..
,, Ashmouni	.. F. G. F.	..	..	..	..
,, ,,	.. G. F.	..	..	..	..
Other varieties.					
Cotton	.. F. G. F.	..	..	..	..
,,	.. G. F.	..	..	..	..
	Total				

Signature of borrower.

(4) MINISTRY OF FINANCE.

Methods of Advancing Money on Cotton.

General directions.

(A) Terms of advance.

(1) Every agriculturist who wants an advance on his cotton (which should neither be less than 5 kantars nor more than 500 kantars) must sign the agreement before receiving the advance money.

(2) Necessary forms of the agreement should be filled in by the cashiers of the different towns who should endorse the application for advance under his signature or seal after being signed by the applicant.

(3) The keepers of godowns should possess sufficient quantity of the agreement forms.

(4) *The advances should* be made as under :—

For each kantar of cotton "Saklaridas". { £ E. 5 for Fully Good, Fair and other superior classes / £ E. 4,500 m.m. for Good Fair.

For each kantar of cotton "Ashmooni". { £ E. 3/500 m.m. for Fully Good, Fair and other superior classes. / £ E. 3 for Good Fair.

For each kantar of cotton of the intermediate varieties. { £ E. 4 for Fully Good, Fair and other superior classes. / £ E. 3/500 m.m. for Good Fair.

(5) Not more than one advance shall be made on each quantity of cotton (lot) and if any agriculturist applies for an advance on other quantities which may be more than the lot, he must accordingly state the same in the Personal Accounts (Form No. 7) *which will be mentioned hereafter.*

(*B*) *The Officials.*

A godown-keeper should be appointed for each godown. Along with other closely connected godowns a packer and a weighman should be appointed, who will receive wages for the work done by them. The cashier should peform the duties of making advances. A special weighing scale should be fixed in each godown.

(*C*) *Methods of advance.*

1. If any agriculturist desires an advance on his cotton, he should go to the nearest godown where the weighman will weigh the cotton and the packer will pack it and the agriculturists should reckon the advance money which he expects to receive. The weight of the cotton and the special number of the lot will be marked on each bag. The godown-keeper will perform the duties of noting the weight and keeping the cotton by lots in his godown. It is important to note that the marks on the bags should be very clearly written.

2. Cotton which is received in the absence of the weighman and the packer, should be weighed by the godown-keeper who should hand over a temporary receipt to the applicant for the cotton (Form No. 1) duly signed. The number of bags and their weights should be clearly stated therein. The applicant for advance should personally attend at the time when the weighman can finally weigh the cotton and the packer pack it, and should then calculate the advance applied for. In such cases, the godown-keepers should inform the cashier, weighman and the packer to attend personally at the appointed hour.

3. The temporary receipts, which will be given by the godown-keepers, will be made in duplicate. The original will be given to the owner of the cotton and the duplicate copy will be retained on the specified register. At the time of final weighment and packing, the cashier will write a final receipt " official "(Form No. 6) which will be duly signed by him as well as by the packer and the godown-keeper. After taking back the temporary receipt (Form No. 1) it should be handed over to the godown-keeper who will attach the same with the counterfoil in the register. Every register of temporary receipts when finished, should be sent to the Manager for maintenance and reference.

4. The godown-keepers, after taking charge of cotton, should obtain specimen signatures of seals from the men who place their cotton as deposit in godowns on (Form No. 2) in duplicate copies. They should also state the name and address of the owner of the cotton as clearly as possible. One copy should remain on record and the other handed over to the cashier who is responsible for paying the advance and who should therefore see that the signature or seal of the receiver of the cash on the said receipt tallies with those on the receipt for the advance (Form No. 8). He should afterwards affix the same on the place of signature or seal, in the receipt, which should be sent to the manager in the manner as shown hereafter.

5. The godown-keeepers should maintain a register (Form No. 12) showing the names of the depositors of the cotton in godowns and also showing the number of the special account written in (register No. 7) against each name, so that it can be checked that not more than 500 kantars of cotton have been offered for deposit by each man.

6. The godown-keepers should have a register (Form No. 3) which should show entries of official receipts (Form No. 6) according to the number of the lot. They should also maintain a daily register of the godown (Form No. 4) and send the same daily to the manager for completing entries in his register. They must also see that a portion of the register should be allotted to each kind of cotton, *i.e.*, Saklaridas, Ashmooni, etc.

7. *The duties of packers.*

(1) To check the quantities of cotton for which temporary receipts were given during their absence in (Form No. 1).

(2) To tally the quantities of cotton in the godown with that received (register of the godown Form No. 3). If any discrepancy be found it should be referred to the manager immediately.

(3) To write Form No. 5 in duplicate with copying pencil in connection with each lot which has been packed. The packers should hand over the originals attaching therewith chits of weight, to the cashier and the duplicate copies should be kept in the godown for further reference if required.

8. Packers, specially appointed, should inspect and watch the work of other packers and ensure that the quantities of certain kinds of cotton in the godowns and those coming afresh are properly checked. If any discrepancy be found in the kind of cotton or in the weight, it should at once be referred to the manager.

9. *Duties of Cashiers.*

(1) To receive and keep in safe custody all cash sent to them by the Managers for payment of advances and Managers should adopt necessary measures to see that the cash in the charge of cashiers is kept in proper safe custody.

(2) To write official receipts (Form No. 6) the registers of which remain in their charge, to take over temporary receipts and to hand them over to godown-keepers for attaching to the counterfoils.

(3) To write receipts for advances (Form No. 8) and to take signatures of depositors of cotton, after verifying their identity and testing the resemblance of signatures or seal of the receiver of the advance on (Form No. 2) handed over to him by the godown-keeper and to attach the same with the said receipt on the place of signature or seal.

(4) To maintain a register (Form No. 7) wherein a special page should be allotted for each and every individual, which should show all advances made (according to payments) the quantities of cotton deposited in godowns and the kinds of cotton.

(5) To maintain a daily register (Form No. 9) on one side of which all cash, received from the Manager for making advances on cotton and the cash returned by the depositors of cotton in satisfaction of advances, will be entered. All expenditure on account of advances will be entered on the opposite side. He should show the daily balance which should be carried forward to the next day. Thereafter he should write (Form No. 13) at the close of every day and send it to the Manager with the necessary vouchers showing his daily transactions. The following documents should be attached :—

(*a*) The agreement (Form "A").

(*b*) The statement of the packer's account (Form No. 5).

(*c*) Receipt of taking advances by the agriculturists (Form No. 8).

(*d*) The duplicate copy of the receipt on account of repayment of advances by the agriculturists (Form No. 18).

(6) Cashiers should inform the Manager on every Tuesday the estimate of the sum which will be required for the succeeding week for making advances and should requisition the money from the Manager as soon as his balance in hand becomes low.

10. *Duties of Managers.*

(1) A special trust account will be opened in the local bank for the purpose of making advances on cotton and the money from the Trust should be drawn by cheques bearing an embossed seal " cotton advances".

(2) The cashiers of the Manager's cash account will open a special account (register Form No. 9) showing all amounts expended and received in addition to the entry in the daily register of the official accounts (Form No. H. A. 41).

(3) The amount of cheques drawn should be entered in a special place provided in the cheque books (Form No. H. A. 56).

(4) Arrangements should be made to despatch the necessary cash to the cashier who should start making advances to agriculturists at the first opportunity and all account books should be prepared. The Manager should at once comply with the weekly demands of the cashier for certain sums to be advanced in the succeeding week so that the cashiers should always have sufficient sums at their disposal for making advances. The same procedure should be followed in the case of additional demands made by the cashiers during the week.

(5) The cash amount sent to the cashiers for this purpose will be shown in their private and individual accounts under the heading "Cotton Advances" and a similar heading will be started in the cash book.

(6) On the receipt of vouchers from the cashiers attached with Form No. 13 it may be taken that the cashier responsible for the accuracy of the accounts has paid the advance and remarks to that effect should be given in the accounts submitted to the Finance Ministry in the special portfolio of accounts under the heading "Advances on cotton during 1928". It should be observed that the accounts of advances and special expenditure should be entered separately. The special expenditure incurred, should be entered under heading "Expenditure incurred on account of cotton advances during 1928". This account should be very brief because this will be entered in Register No. 9 which will be maintained by the Accountant specially appointed for the advance system.

(7) *Register (Form No. 3).*

(*i*) The daily chits (Form No. 4) which will be submitted by the godown-keepers daily will be entered briefly in this register, by godowns and on special pages allotted separately for each kind of cotton, *i.e.*, Saklaridas, Ashmooni, etc. Another note book will also be kept where in the daily transactions of each godown and of each kind will be entered. The name of each godown will be entered in the column provided for each lot.

(*ii*) Register (Form No. 3). The amounts received with the cashier's chits (Form No. 13) principal and interest will be entered separately. This register should invariably be checked with the register of agreement maintained by the Accounts Branch of the Manager. It should be seen that special pages be allotted for entering the account of each cashier and that brief notes of the daily transactions maintained by the cashiers should be entered at the foot of each page.

(*iii*) Register (Form No. 7). Statement of personal accounts should be kept for each depositor of cotton and a special register should be allotted for each godown.

(*iv*) Register (Form No. 12). In this register 5 pages should be alloted to each letter of Alphabet and the number of the page showing personal accounts should be given against each name (in register No. 7). The name of the godown, wherein the cotton for which advances have been made are kept, should be written in the remarks column.

(*v*) The Accountant should write briefly the name of the cotton by kinds in the weekly statement (Form No. 14) and also all advances made from each godown. This statement will be submitted to the Ministry of Finance on Thursday in each week.

(*vi*) On receipt of the daily account of the cashiers (Form No. 13) the cash will be checked against vouchers attached as mentioned under Article 9—"Cashiers" of these directions. The Ministry of Finance has appointed an Inspector of accounts who will see that these instructions are fully carried out. If any difficulty arises, we hope that Managers will send their views to us. The Ministry of Finance is ready to answer any enquiry received by them in this connection.

The Government press has been directed to despatch a sufficient number of the forms together with these Instructions to Managers.

Finance Representative,
Ahmad Abdul Wahab.

5. AN ACT FOR THE REALIZATION OF SECURITY IN THE CONTRACT OF ADVANCES MADE BY GOVERNMENT TO COTTON CULTIVATORS.

We, Fouad I, King Egypte, having approved of Edict No. 46 of 19th July 1928 on the proposal of our Finance Minister, and on the advice of our Cabinet, decree—

1. The present law is applicable to advances made by Government and by Banks on Government account to cultivators against the delivery of cotton as security in virtue of the decision of the Cabinet, date 21st August 1928, and of any decision having the same object which may be taken in future.

2. In default of paying, at maturity, the capital, interest, and expenses which have been advanced by Government to cultivators, Government will proceed to sell the cotton thus deposited under the conditions mentioned hereafter.

3. The cultivator-debtor will be advised by letter notifying him that in default of payments, the sale of the pledged cotton will be proceeded with.

The sale will take place only at the expiration of a period of 30 days counting from the date of the despatch of the notice.

4. The sale will be made under the direction of the Finance Minister whether by public auction or in any other manner that he considers fit.

In cases where the Minister decides to sell the cotton by means of auction, the sale will be carried out in a place or market or "Halaka" fixed by him. The place, day and time of sale will be fixed to the door of the "Chouna" where the cotton is deposited or on the gate of the market or of the *halaka*. In cases where the Finance Minister decides to sell in any other way, the debtor will be informed eight days before the sale, the price offered and the name of the purchaser.

5. One per cent. (1 per cent.) will be recovered from the sale proceeds for the expenses incurred in realizing the security. From the net price will be deducted the amount of advance due in principal and interest as well as the other expenditure and the balance, if any, will be sent to the debtor.

6. The sale will take place, notwithstanding any distraint or opposition from any other creditor. But in case of distraint or opposition the balance, if any, will be lodged with the treasury of a competent tribunal and will be disposed according to right.

7. Our Finance Minister is charged with the execution of the present law which will come into force from the date of publication in the *Official Gazette*. We direct that the present law be sealed with the Seal of the State, published in the *Official Gazette*, and executed as a Law of the State.

APPENDIX XXVIII.

SUBJECT 19.—*Technological Research.*

I.—Progress Report of Director (No. 12).

Considerable progress has been made in the Technological Laboratory since the issue of the Progress Report No. 11 in November last. The work done is considered under the following heads :—

I. Spinning Laboratory ;
II. Research Laboratory ;
III. Publications ;
IV. General ;
V. Programme of work for June-December 1929.

I. Spinning Laboratory.

Since the last Progress Report was issued, 102 samples have been received; of these 48 are samples from agricultural officers for complete testing, and 24 are samples for fibre tests only. The following is a list of cottons which have been received, or on which reports (Nos. 69-76) have been issued, during the period under review (November 23rd 1928 to May 31st, 1929) :—

Stores No.	Cotton.	Supplier's name.	Date of receipt.	Remarks.
477-481	Punjab NT cottons..	Cotton Research Botanist, Lyallpur.	29th October 1928. ..	Spinning Test Report No. 70 dated 21st December 1928.
482-487	4F (Flat and Ridge)	Do. ..	Do. ..	Spinning Test Report No. 66, dated 5th December 1928.
488-492	Punjab NT cottons..	Do. ..	Do. ..	Spinning Test Report No. 70, dated 21st December 1928.

Stores No.	Cotton.	Supplier's name.	Date of receipt.	Remarks.
494	P. A. 4F ..	The B. C. G. A. (Punjab), Ltd., Khanewal.	29th November 1928.	Technological Reports, 1929.
495	P. A. 289F ..			
496	Mollisoni ..			
497	Umri Bani ..	Messrs. Jamnadhar Potdar, Umri.	14th December 1928.	Do.
498	4F Bhawalpur ..	The B. C. G. A. (Punjab), Ltd., Khanewal.	18th December 1928.	Technological Report on Punjab-American and desi cottons.
499	4F Shahpur ..			
500	285F ..			
501	Mollisoni ..			
502	J. N. 1 ..	Deputy Director of Agriculture, Central Circle, Cawnpore (U. P.).	20th December 1928.	Technological Report, 1929.
503	C. A. 9 ..			
504-512	U. P. cottons ..	Asstt. Economic Botanist to Government, U. P., Cawnpore.	20th December 1928.	Spinning Test Report No. 72, dated 14th March 1929.
513	Banawar cotton ..	Messrs. Langley & Co., Bombay.	20th December 1928.	Under test.
514	P. A. 289F. ..	The B. C. G. A. (Punjab), Ltd., Khanewal.	27th December 1928.	Technological Circular No. 16.
515	N. R. ..	Superintendent, Jalgaon Farm, Jalgaon.	Do. ..	Spinning Test Report No. 71, dated 6th February 1929.
516	Dhulia No. 1 ..			
517	B. XXI ..			
518	K. 22 ..	Superintendent, Government Cotton Research Farm, Raya.	10th January 1929...	Technological Report, 1929.
519	Dhulia No. 1 ..	Cotton Overseer. Amalner.	17th January 1929...	Spinning Test Report No. 71.
520	Verum 262 ..	Economic Botanist to Government, C.P., Nagpur.	22nd January 1929...	Technological Report 1929.
521	P. A. 4F ..	Cotton Research Botanist, Lyallpur.	28th January 1929 ..	Technological Report on Punjab-American and desi cottons.
522	P. A. 289F ..			
523	Mollisoni ..			
524	P. A. 289F ..	Coleyana Estate, Ltd., Okara.	29th January 1929...	Do.
525	Mollisoni ..			
526	P. A. 285 F Pick II..	Cotton Research Botanist, Lyallpur.	2nd February 1929...	Spinning Test Report No. 73, dated 26th March 1929.
527	285F. Pick I. ..			
528	P. A. 4F ..	Coleyana Estate, Ltd., Okara.	Do. ..	Technological Report on Punjab-American and desi cottons.
529	Pure Special 4F ..	The Nili Factories, Ltd., Burabala.	12th February 1929.	American and desi cottons.
530	Aligarh A. 19 ..	Superintendent, Government Farm, Aligarh.	18th February 1929.	Technological Report 1929.
531-535	Surat cottons ..	Cotton Breeder, South Gujerat, Surat.	14th March 1929.	Spinning Test Report No. 74, dated 2nd May 1929.

Stores No.	Cotton.	Supplier's name.	Date of receipt.	Remarks.
536	Wagad 4 ..	Cotton Breeder, North Gujerat, Viramgaon.	3rd April 1929. ..	Technological Report, 1929, and Spinning Test Report No. 75, dated 2nd May 1929.
537	Wagad 8 ..			
538	Wagad Local ..			
539	Wagad B. B. M. ..			
540	Cambodia Co. 1 ..	Agricultural Demonstrator, Bhavani.	8th April 1929 ..	Technological Reports, 1929.
541	Dharwar 1 ..	District Cotton Overseer, Hubli.	Do. ..	Do.
542-545	Broach cottons ..	Cotton Breeder, South Gujerat, Surat.	15th April 1929. ..	Under test.
546-549	Coompta cottons ..	Messrs. Tata Mills, Parel.	16th April 1929. ..	..
550	Co. 2 (440) ..	Cotton Specialist, Coimbatore.	26th April 1929. ..	Technological Reports, 1929.
551	Nandyal 14 ..	Farm Manager, Government Experimental Station, Nandyal.	27th April 1929. ..	Do.
552	Hagari 1 ..	Manager, Government Experimental Station, Hagari.	29th April 1929. ..	Do.
553	Hagari 25 ..			
554	Hagari A ..	Do. ..	Do. ..	Under Test.
555	Hagari B ..			
556	Karunganni C7 ..	Assistant Cotton Specialist, Koilpatti.	4th May 1929 ..	Technological Reports, 1929.
557	Nandyal No. 4 ..	Assistant to the Cotton Specialist, Nandyal.	Do. ..	Under test.
558	Nandyal No. 5 ..			
559	1027 A.L.F. 1 ..	Cotton Physiologist, Surat.	Do. ..	Do.
560	1027 A.L.F. No. (2)..			
561	Mollisoni ..	Messrs. Gill & Co., Bombay.	2nd May 1929. ..	Spinning Test Report No. 76, dated 29th May 1929.
562	Gadag 1 ..	District Cotton Overseer, Gadag.	10th May 1929. ..	Technological Reports, 1929.
563	1027 A.L.F. No. 9..	Cotton Physiologist, Surat.	18th May 1929. ..	Under Test.
564	1027 A.L.F. No. 32			
565	D1 X D2 cross ..	District Cotton Overseer, Hubli.	20th May 1929. ..	Do.
566	Co. 2 (440) ..	Cotton Specialist, Coimbatore.	21st May 1929. ..	..
567	Indicum Cernuum .. No. 99.	Do. ..	Do. ..	..
568	Cocanada No. 171 ..	Cotton Assistant, Guntur.	23rd May 1929. ..	..
569	Coconada Local ..			
570-592	Bihar and Orissa Cottons (23 samples)	Director of Agriculture, Bihar and Orissa.	29th May 1929. ..	For fibre test.
593	Sea Islands ..	Director of Agriculture, Burma.	29th May 1929. ..	Do.
594	New Cross ..	Cotton Sale Society, Bailhongal.	29th May 1929. ..	..
595	Kumpta Cross ..			

Distribution List.—The distribution list of cotton samples spun between November 23rd, 1928, and May 31st, 1929, is as follows :—

Provinces.	Samples.	Lots.	Yarns.
Bombay	19	38	114
Punjab	19	37	116
United Provinces	9	18	54
Madras	5	10	30
Central Provinces	1	2	6
Miscellaneous	1	1	3
Total ..	54	106	323
Standards ..	27	60	176
Grand Total ..	81	166	499

It will be seen from this list that the number of lots spun averages 27 per month, and that the Spinning Laboratory has been fully occupied during the period in question.

Standard Cottons.—An effort has been made this season as last—to expedite the publication of the results of our tests on the standard cottons. Separate reports have been issued on the following cottons :—

Punjab-American 4F (8th December 1928).

Punjab-American 289F (15th December 1928).

Umri-Bani (21st December 1928).

Surat 1027 A.L.F. (23rd March 1929).

Cambodia Co. 1 (16th April 1929).

Dharwar 1 (22nd April 1929).

This year, however, some of the cottons were received much later than last year, no less than 6 cottons being received from April 26th onward, so that on these cottons no separate reports were issued, arrangements having been made for the immediate issue of the complete Bulletin No. 21, "Technological Reports on Standard Indian Cottons, 1929." The last cotton to be received was Gadag 1, which arrived some six weeks later than usual owing to the crop being late this year.

Punjab cottons.—A number of samples of Punjab-American and Mollisoni cottons have this season been received from various parts of the Punjab, and in one or two instances have given striking differences according to the place of growth. A Technological Report has therefore been prepared giving the results in some detail, and also a short discussion of them.

Blow-room tests.—Considerable progress has been made with the tests on blow-room loss and card-room loss of certain commercial standards kindly supplied by the East India Cotton Association. At the present time all except two of the bales have been put through the machinery, and it is expected therefore that the experimental part of this work will be completed at an early date. A digest of the results already obtained is attached as Appendix A to the present report.

High Drafts.—In accordance with the decision of the Committee at the last Meeting, arrangements have been completed for testing three systems of high draft, *viz.*, Casablancas system (apron system); the Ingolstadt system (a three-line bottom-roller system); and Tweedales and Smalley's system (a four-line roller system). All the firms concerned have kindly agreed to supply the necessary parts, and to carry out free of cost the alterations necessary in the machinery. Already one side of our ring frame No. 2 has been converted for use on the Casablancas system. A short note giving details of the proposed method of making the tests is given in Appendix B.

Limit-spinning test.—Some misunderstanding has occasionally been caused by the references, in the reports on the standard cottons, to the highest standard warp counts for which any given cotton is suitable, although it is clearly pointed out in "Technological

Reports " that the count in question is simply the highest count at which the cotton can be spun, with a definite twist factor, to yield yarn of a certain strength. When the standards were originally adopted it was pointed out that these were merely tentative, and it has always been intended to investigate the possibilities of the standard cottons in much higher counts than those in which they are normally spun at the Laboratory. A beginning has been made in the spinning of Cambodia Co. 1 (295). Although this cotton on the scale adopted is adjudged suitable for 36's counts, it has actually been found possible to spin it to as high as 70's counts from single roving. However, the breakages in this case were far too numerous to permit of the spinning being economical at this limit. A summary of some of the results for this cotton is given in Appendix C, from which it will be seen that the highest economic limit with a twist constant 4 is 52's, and with a twist constant 4½, 56's. A similar experiment has been started on Mollisoni cotton, but has had to be put on one side for the time being owing to the rush of standard and agricultural samples which have been received during the past few months. These tests will be continued, however, as the opportunity presents itself.

II. Research Laboratory.

Fibre Testing Section.—This section has continued to make fibre tests on all cottons which are subjected to spinning tests, the chief tests being those of fibre-length, fibre-length distribution, and fibre-weight per inch. This section has made many tests of this kind, and of fibre-strength, fibre-rigidity, and fibre-clinging power, on the standard Indian cottons of seasons previous to 1926-27 to supplement those already made on the cottons of the 1926-27 and 1927-28 seasons; in fact, the fibre-weight per inch has now been determined for all the standard cottons from the beginning. The tests on the standard cottons of 1928-29 have also been completed, and the results incorporated in Bulletin No. 21, " Technological Reports on Standard Indian Cottons, 1929."

Chemistry Section.—A short progress report prepared by Mr. D. L. Sen on his work is given in Appendix D. He has continued his experiments on the spontaneous combustion of cotton, and also his work on the determination of the proportions of the various chemical elements present in the standard cottons.

Physics Section.—Mr. D. F. Kapadia has made good progress in the statistical analysis of his experimental results for the variation of counts and strength of yarns.

Mr. Ram Saran Koshal has now completed one portion of the statistical analysis of his investigation of the relation between fibre-length, fibre-strength, fibre-rigidity, fibre-width and fibre convolutions.

Microscopy Section.—Mr. H. N. Dutt has completed his tests on the strength of cotton fibres of Punjab-American 289F and Aligarh A.19, and is now engaged in the analysis of the results.

Mr. A. N. Gulati has completed his investigation on the relation between certain fibre-properties and yarn-properties of some standard cottons, and is now engaged in the analysis of the results.

III. Publications.

The following is a list of publications which have been prepared by the Director since the last Progress Report was issued :—

Bulletin No. 18.—" Ginning Percentage and Lint Index of Cotton in Relation to the number of Cotton Fibres per seed; the Effect of Environment of Ginning Percentage; and the Determination of Unit Fibre-Weight."

Bulletin No. 19.—" Further Tests on the Effect of Temperature and Humidity on Cotton Spinning."

Bulletin No. 20.—" The Effect of Using either One Head or Two Heads of Drawing instead of Three Heads of Drawing in the Spinning Preparation for Spinning Tests."

Bulletin No. 21.—" Technological Reports on Standard Indian Cottons, 1929."

In addition to the above, the Director has contributed an article to the " Agricultural Journal of India " for March, entitled " Cotton Seeds : their Absorption of Water, and their Specific Gravity."

As previously mentioned, a Technological Report has been prepared on samples of Punjab-American and Mollisoni cottons grown in different parts of the Punjab.

A short paper has been prepared, and is now practically ready for publication, dealing with a comparison of the Balls, O'Neill, and Barratt methods of determining the strength of single fibres

Another paper has been nearly completed dealing with "Studies in Cotton Sampling for the Determination of Fibre-Properties", based chiefly on Mr. Ram Saran Koshal's work.

The following are the Summaries of Bulletins Nos. 18-20 referred to above, and the Preface to Bulletin No. 21.

Ginning Percentage and Lint Index of Cotton in Relation to the Number of Cotton Fibres per seed; the Effect of Environment on Ginning Percentage; and the Determination of Unit Fibre-Weight.—The amount of lint borne on a single cotton seed is a matter of considerable economic importance. It is commonly represented by the ginning percentage, *i.e.*, the weight of lint expressed as a percentage of the weight of the seed cotton from which the lint is obtained; a more modern method is by reference to the lint index, *i.e.*, the weight of cotton borne by 100 seeds; the relative merits of these two expressions are briefly discussed. The remainder of the paper is chiefly concerned with an examination of the relation of these two expressions to the number of fibres per seed, and the methods for determining this. It is pointed out that variation in lint-weight and seed-weight may be brought about by many different causes, *viz.*, differences in the age and situation of seeds and bolls, and in the variety and conditions of growth of plants. The work of Leake, Balls, and Burd is then critically reviewed; the scope of the investigation of each was different, and from the symbolical expressions for their several conclusions it is shown that the claim that their results are mutually confirmatory cannot be sustained. It is concluded that the lint index cannot be measured only by the number of fibres per seed; and that from the number of variables appearing in the equation for ginning percentage, no direct proportionality ought to be expected between the ginning percentage and the number of fibres per seed, or any other single property, whether volume of seed or unit fibre-weight. These conclusions are confirmed by an examination of the available data, including many new results obtained at the Technological Laboratory for various Indian cottons.

The conclusions of Balls that outturn fluctuations are due to differences in the environmental conditions on the day of flowering, and that the number of epidermal cells which sprout into hairs is determined by such differences, are examined at some length, and shown to be of doubtful tenability; it appears more probable that lint hairs continue to be differentiated after the day of flowering; and from Ball's experimental results it appears that the weight of lint per unit area of seed-surface is practically constant for different sizes of seed, and that this almost completely accounts for the fact that smaller seeds have a higher ginning percentage. Whereas Ball's view necessitates that the smaller seeds should each have a greater *total* number of fibres, it is shown that if we take the product of fibre-strength and fibre-length as a measure of unit fibre-weight, higher ginning percentage is more generally associated with a *smaller* number of fibres per seed. However, neither the total number of fibres per seed nor the number of fibres per unit area of seed-surface is directly proportional to the seed-weight or to the ginning percentage, so that these results do not enable us to decide whether or not the differentiation of all the lint cells takes place on the day of flowering, or what may be the influence of the environment on this differentiation.

It is pointed out that it is advantageous to study the ginning percentage of individual seeds, and a number of such results are given for the Bengals cotton, Aligarh A. 19, and for Punjab-American 4F. These cottons also display the property of association of high ginning percentage with low seed-weight; the weight of lint per unit seed-surface is practically the same on the average for the small, medium, and large 4F seeds, but fluctuates considerably for individual bolls of A. 19. From actual determinations of fibre-weight in each case, it is again concluded that neither the total number of fibres per seed nor the number per unit area of seed surface is directly proportional either to the seed-weight or to the ginning percentage.

In order to determine the number of fibres per seed it is necessary to ascertain the weight of the single fibre, and the various methods of doing this are discussed. It has been claimed that for a given variety of cotton the fibre-weight per unit length is independent of the fibre-length. From an examination of the various possibilities in the development of lint on the seed, it is concluded that, if we take into consideration both the hereditary and environmental factors operating during the growth of the lint, the fibre-weight per unit length may differ for different lengths of fibre, and that, in general, a tendency may exist for the shorter fibres to have a rather greater fibre-weight per unit length. Results are given for certain Indian cottons which show not only that some varieties do display a greater fibre-weight per unit length for their short fibres, but also that in some cases the fibre-weight of individual fibres decreases very considerably from the middle of the fibre to the apex. These results hold good even for the fibres on an individual seed. The paper concludes with a description of a method for determining the average number of

fibres of each group-length per seed, and summarises the results so far published for the number of fibres per seed of different varieties of cotton.

Further Tests on the Effect of Temperature and Humidity on Cotton Spinning.—In Bulletin No. 9 a description was given of spinning tests carried out under three sets of conditions (1) medium-dry, *i.e.*, temperature about 79°F., and relative humidity 46 per cent., but in one case as low as 31 per cent.; (2) normal, *i.e.*, temperature about 82°F., and relative humidity 65 per cent.; (3) monsoon, *i.e.*, temperature 90°F., and relative humidity 70 per cent.

From these tests it was concluded that the processing of the material in cotton spinning and the quality of the spun yarn are not seriously affected by the spinning processes being carried out at a relative humidity as low as 40 per cent.; although for the comfort of the working staff the normal conditions are more satisfactory than extreme conditions of dryness or dampness. Further tests have now been carried out with the object of testing the effect of conditions similar to those often experienced in up-country mills *viz.*, a temperature of about 100°F. and a relative humidity of about 25 per cent. These conditions are described as "hot-dry".

The tests were restricted to the two cottons, Nandyal 14 (Northerns), and Memphis (American), which were spun under all four sets of conditions. Observations were made, under each set of conditions, of (1) comfort in working; (2) workability of material; and (3) the appearance of the yarn. In addition, determinations were made of (4) the regain of the cotton at various stages; (5) the yarn-strength; and (6) the yarn-extension.

The results obtained confirm and extend those of the previous tests. By reducing the relative humidity to below 30 per cent. a stage is reached when drawing cannot be carried out satisfactorily; moreover, yarn breakages on the ring frame become more numerous at this low humidity, the effect being especially pronounced in the higher counts, which also have lower strength when spun under very dry conditions. It is accordingly concluded that although for Indian cottons spun into counts not higher than 40's it is sufficient to keep the relative humidity rather above 30 per cent., yet if higher counts were to be spun, bad spinning troubles would be still more in evidence, and it would be desirable to work at a higher relative humidity, say at least 40 per cent., or even higher for very fine counts. The yarns spun under the various conditions of temperature and humidity, while very similar in evenness and neppiness, yet differ widely in their appearance, for the yarns spun under the hot-dry conditions are very oozy indeed, full of snarls, and exceedingly crimpy; the yarns spun under medium-dry conditions suffer from the same defects to a lesser extent, whereas the yarns spun under normal and monsoon conditions are free from them. However, all these differences between the yarns almost entirely disappear when the yarns are conditioned by immersion in water.

The Effect of Using either One Head or Two Heads of Drawing instead of Three Heads of Drawing in the Spinning Preparation for Spinning Tests.—In spinning tests at the Technological Laboratory the card sliver is passed through two heads of drawing only, even for 40's counts, whereas three heads of drawing are commonly employed in Indian mills. In order to determine experimentally how far this procedure is justified, comparative tests have been made on eight standard Indian cottons and two American cottons; a 30-lb. sample of each cotton, after being carded, was divided into six lots; two of these lots were passed through one head of drawing, two were passed through the normal two heads of drawing, and the remaining two lots were passed through three heads of drawing. A record was maintained of the number of yarn breakages in the ring frame, and each yarn was classified for evenness and neppiness, and subjected to tests for counts, lea strength, single thread strength and extension, and twist. In all, 9,000 tests were made for lea strength and counts, 18,000 tests for single thread strength and extension, and 18,000 tests for twist.

From the various test results it is clear that whether the card sliver is subjected to one, two, or three heads of drawing makes little difference to the number of yarn-breakages sustained in the ring frame, or to the various yarn properties, *viz.*, evenness, neppiness, strength, and extension. It is true that the yarns for the two and three heads of drawing are slightly stronger than those for one head of drawing, but the difference is small, and as between the yarns for the two and three heads of drawing there is very little to choose. It follows, therefore, that the practice at the Technological Laboratory of using only two heads of drawing gives results similar to what might be expected from three heads of drawing. It is emphasized, however, that the card sliver used for drawing in these tests is the production of a single card; and that if, as in mill practice, card slivers from a number of cards were to be fed to the first head of drawing, the results would be affected by the extent of the differences between the different card slivers, so that this effect would have to be allowed for in applying the results of the present tests to mill practice.

Technological Reports on Standard Indian Cottons, 1929.—The present edition of " Technological Reports on Standard Indian Cottons " includes the results of the tests on the standard cottons of the six seasons 1923-29. As in former editions, Agricultural Details, Grader's Reports, Fibre Particulars, Spinning Test Reports, and Remarks, are given for the eighteen standard Indian cottons which have been the subject of reports in previous years. The most important new feature is the inclusion of the results for three new standard cottons, *viz.*, Verum 262, Cambodia Co. 2 and Hagari 1, which have been developed during the period in which the Technological Laboratory has been at work. Verum 262 is being grown in Central Provinces and Berar in tracts where hitherto the main cotton crop has been of a short and harsh cotton, suitable only for about 8's count; yet Verum 262 is a good stapled and soft cotton capable of spinning from 20's-24's warp; moreover it is a good wilt-resister, so that on wilt-affected land, of which there is so much in Berar, it yields much more heavily than the coarse cotton, which is very susceptible to wilt. The case for the two Madras cottons, Cambodia Co. 2 and Hagari 1, is rather different, as these are being spread in tracts which already grow very similar cottons, Cambodia Co. 1 and Hagari 25 respectively. It appears that Cambodia Co. 2 is hardly as good a cotton as Cambodia Co. 1, but as it yields much more heavily, and is a better resister of the stem-weevil and black arm, it is much more profitable to the grower. The difference between Hagari 1 and Hagari 25 appears to be still less; Hagari 1 has given much the same spinning test results as Hagari 25, but it has a higher ginning percentage, and appears to give a slightly higher yield.

An addition has been made to the Agricultural Details section of each report, with a view to conveying a rough idea of some important characteristics of the plant, *viz.*, the spacing of the plants, the numbers of bolls per plant and seeds per boll, the weight of a single seed and the weight of lint per seed, together with the ginning percentage previously given.

A short section has been added to the Introductory note with a view to giving some idea of the distribution and character of the Indian cotton crop according to trade descriptions.

The increase of the number of seasons for which the tests are included has this year necessitated considerable changes in the presentation of the results for each cotton. Chief among these is that, whereas the tables of spinning test results formerly showed the results for each of the duplicate lots into which each sample of cotton is spun, in the present edition only the mean values for each pair of lots are included, except in the case of the 1928-29 season; further, the results in different seasons for any one count are now given in successive lines so as to facilitate the examination of seasonal variation. Other changes are: the yarn examination reports are not now given separately but are included in suitable columns in the tables of spinning test results; and the results obtained by the old method of twist-testing have now been omitted as experience with the new method has shown them to be quite unreliable. Difficulties have also arisen in showing the fibre-length distributions for successive seasons in a single diagram; consequently the plan has now been adopted of giving only the result for each cotton of 1928-29 compared with the average result for the same cotton for all the previous seasons in which it has been tested.

In view of the apparent anomaly presented by the values of the fibre-lengths of Punjab-American 285F and Cambodia Co. 1 in 1923-24, the original samples of these cottons have been subjected to retests, and certain corrections have accordingly become necessary in these values. Slight alterations have also been made to the figures given in previous editions for the fibre-weights and fibre-strengths; this is a consequence of all values now being given as at 70 per cent. relative humidity; full details of the correction-factors used for this purpose are given.

In former editions a section of the general discussion of results was devoted to the relation between fibre-properties and spinning value; this section has now been omitted as the subject is being more fully dealt with in a separate bulletin.

IV. General.

Staff.—There have been no changes in the staff during the period covered by this Progress Report.

Research Students.—Mr. R. L. N. Iyengar has completed his investigation of the fibre-length and fibre-weight of the standard cottons of the 1926-27 and 1927-28 seasons, and has also written an account of these experiments, his studentship having been extended for two months for this purpose. At the expiry of his studentship he is proceeding to Coimbatore as Technological Assistant to the Cotton Specialist there. Mr. Iyengar's work has throughout been very satisfactory.

Mr. C. Nanjundayya has made determinations of the variation of the fibre-weight per inch along the length of the fibre; he is doing this for a number of standard Indian cottons, and has already obtained some very interesting results.

Mr. Srinagabhushana joined the Laboratory on 18th January 1929, and has since been gaining experience in all the varied methods of fibre testing. He has also given assistance in the testing of the 1928-29 samples of the standard cottons. He is now beginning an investigation of the changes in fibre-properties of a number of standard cottons at various stages in the spinning processes; a feature of this investigation is that it will comprise an examination of the waste produced as well as of the material which is actually spun into yarn.

Building.—In January last there were one or two extensive falls of plaster from the ceilings of the first floor of the Research Laboratory building. This was found to be due to the fact that the reinforced concrete surfaces had not been roughened after they had set. As a consequence, it has become necessary to have all the ceilings throughout the building taken down and remade at the Contractor's expense. At the same time the opportunity is being taken to give two coats of colour wash to the inside walls, as these have not been decorated since the building was completed in 1925.

V. Programme of Work for June-December 1929.

During my absence on leave, I am making arrangements for the following work to be carried out by the various sections:—

Spinning Laboratory.

(1) Testing samples for Agricultural Departments as received.

(2) Completing tests on the Blow-room loss, etc., of commercial cottons.

(3) Tests on High Drafting.

(4) Limit-spinning tests.

Research Laboratory.

Fibre Testing Laboratory.

(1) Testing of samples for Agricultural Departments.

(2) Tests on Standard Indian Cottons for past seasons.

(3) Comparison of strength-test results for single fibres, and groups of fibres.

(4) Tests on clinging power.

Chemistry Section.

(1) Experiments on the spontaneous combustion of cotton.

(2) Determination of the chemical properties of the standard cottons—1928-29.

Physics Section.

Mr. D. F. Kapadia.

(1) Continuation of statistical analysis of experimental results for the variation of counts and strength of yarns.

(2) Experiments on lea strength compared with single thread strength for different lengths of yarn.

Mr. Ram Saran Koshal.

(1) Continuation of the statistical analysis of his investigation of the relation between fibre-length, fibre-strength, fibre-rigidity, fibre-width, and fibre convolutions.

(2) Comparison of actual and apparent fibre-lengths of standard cottons.

(3) Variation of the strength of a cotton fibre along its length.

Microscopy Section.

Mr. H. N. Dutt.

(1) Completion of statistical analysis of fibre-strength results of Punjab-American 289F and Aligarh A. 19.

(2) Measurement of halo-lengths of standard Indian cottons 1928-29.

Mr. A. N. Gulati.

(1) Completion of investigation of relation between fibre-properties and yarn properties for certain cottons.

(2) Investigation of degree of maturation of various cottons.

In conclusion, I wish to place on record my appreciation of the continued good work of the staff, nearly all of whom have been recently engaged in the work required for Technological Reports, 1929,—work which has had to be carried on at high pressure under the exceptionally hot and humid conditions prevalent throughout March, April and May.

(Signed) A. JAMES TURNER,
Director,
Technological Laboratory.

May 31st, 1929.

APPENDIX A.

Summary of Blow-Room and Card-Room Losses of some Commercial Standards.

Bale.	Cotton.	Grade.	Blow-Room Loss (per cent.)	Card Loss (per cent.)	Blow-Room Loss (per cent.)				Card Loss (per cent.)			
					First 100 lbs.	Second 100 lbs.	Third 100 lbs.	Remainder.	First 100 lbs.	Second 100 lbs.	Third 100 lbs.	Remainder.
I	C. P. No. 1 ..	Fine ..	5·55	4·81	5·72	5·27	5·77	5·41	4·96	4·70	4·77	4·81
II		,, ..	4·84	5·01	4·30	4·47	5·04	5·74	4·88	5·04	4·97	5·20
III		,, ..	5·43	5·16	5·59	4·97	5·05	6·11	5·11	5·04	5·11	5·40
IV		,, ..	5·80	5·60	6·09	5·75	5·22	6·21	5·57	5·67	5·48	5·70
V		,, ..	4·38	5·54	4·72	4·06	4·44	4·29	5·42	5·52	5·66	5·57
	Average for C. P. No. 1 Fine.	Fine ..	5·20	5·22	..	..	..	..	..	..	..	..
	C. P. No. 1 ..	Superfine ..	4·09	5·76	3·77	4·14	4·13	4·34	5·76	5·74	5·69	5·87
	Punjab-American ..	Fully Good ..	11·30	7·58	11·19	11·53	11·56	10·87	7·46	7·74	7·39	7·76
	,, ..	Fine ..	8·95	6·66	8·88	8·94	8·69	9·42	6·46	6·70	6·74	6·80
	U. P. Bengals ..	Fully Good ..	9·40	10·37	8·88	9·69	9·25	9·81	10·20	10·54	10·30	10·45
	,, ..	Fine ..	8·65	8·86	9·16	8·53	8·00	8·97	8·56	8·99	8·97	8·95
	,, ..	Superfine ..	7·01	6·92	7·19	6·94	6·94	6·95	6·88	6·70	6·89	7·26
	Rajpipla	Fully Good ..	9·11	6·19	10·31	8·56	8·88	8·41	5·84	5·65	6·52	7·18
	,, ..	Fine ..	7·66	6·71	7·75	7·75	7·33	7·86	6·91	7·11	6·17	6·64
	,, ..	Superfine ..	9·10	6·25	9·00	9·41	8·77	9·23	6·32	6·19	6·20	6·30
	Hubli-Coompta ..	Good ..	12·02	6·63	11·66	11·63	12·25	12·65	6·51	6·82	6·45	6·78
	,, ..	Fully Good ..	14·23	7·39	14·63	14·88	13·17	14·23	7·10	7·45	7·56	7·44
	,, ..	Fine ..	14·45	7·15	13·90	15·34	14·59	13·90	7·08	7·00	7·24	7·28
	Gadag Upland ..	Fully Good ..	18·32	9·92	10·97	19·59	21·06	21·44	7·74	10·18	11·40	10·33
	,, ..	Strict Fine ..	16·01	8·94	16·64	18·47	18·20	10·08	9·37	9·01	9·83	7·38

Notes on Appendix A.

The following points may be noted:

(1) *C. P. No. 1 Fine.*—There is a good deal of difference between the five bales classified as Fine; the blow-room loss varies from 4·38 to 5·80 per cent., and the card loss varies from 4·81 to 5·60 per cent. In any one bale there is often considerable difference between the 4 lots into which each bale is divided. The most variable bale is No. II in which the blow-room loss varies from 4·30 per cent. for the first lot to 5·74 per cent. for last lot.

(2) *C. P. No. 1 Superfine.*—It is noteworthy that the difference between the blow-room loss for this bale and bale No. 5 of Fine C. P. No. 1 is much less (0·29 per cent.) than the difference (1·42 per cent.) between bales IV and V of Fine C. P. 1.

(3) *Rajpipla.*—The Fine Rajpipla gives a much lower blow-room loss than the Superfine, which indeed actually gives as high a blow-room loss as the Fully Good; it may be added that the Fine was supplied by one firm and the other two bales by another firm. The reason why Fully Good has been graded differently from the Superfine is probably due to the great variability of the Fully Good, and it appears likely that the grading sample was taken chiefly in the neighbourhood of the first 100 lbs. lot, which gave a much higher blow-room loss than any of the other three lots.

(4) *Hubli Coompta.*—The Fully Good and Fine give nearly the same blow-room loss the difference being only 0·22 per cent. Here again there is considerable variability in the separate bales, especially between lots 2 and 3 of Fully Good and lots 1 and 2 of Fine.

(5) *Gadag Upland.*—This cotton was by far the worst of any of these commercial standards, both bales being exceedingly variable, and containing a large quantity of kapas, which apparently had been put in deliberately. In each case there was a layer, constituting about the quarter of the bale on the top or the bottom side, which was practically free from kapas; this accounts for the fact that the blow-room losses of the first lot of Fully Good and of the last lot of Superfine were little more than half that of each of the other lots.

APPENDIX B.

High Draft Experiments.

The following are the details of the proposed method of carrying out the experiments on spinning with high drafts. The original proposal was that the three systems should be tested successively against the ordinary system of drafting. But as during the next six months there are no standard cottons to be tested, and there is likely to be a lull in the receipt of samples from Agricultural Departments, it appears desirable to carry out *simultaneously* the tests on the three systems of high drafting. Moreover, this would, I think, be regarded as more satisfactory by the different firms who are providing the necessary material, etc., free of cost. If the tests are carried out simultaneously the internal organisation of the tests will be much facilitated, whereas if the tests are carried out in succession it will be necessary to store a large number of roving bobbins of different cottons, pending the completion of the tests on any one system. Moreover, simultaneity in the testing of the three systems ensures not only that the roving bobbins will be in the same condition, but also that the spinning tests will be carried out under the same physical conditions of temperature and humidity.

Experiments will be made with the following systems of high drafts:

(1) Casablancas;

(2) Ingolstadt;

(3) Tweedales and Smalley's.

It is proposed to use the following cottons in these tests:

Surat 1027 A.L.F., Mollisoni, Punjab-American 289F, Bundelkhand J. N. 1, and Hagari 25.

This series of cottons gives a good range of spinning quality of cotton, as well as of district of growth, and botanical species.

For a complete set of tests on any one cotton, a mixing of 120 lbs. will be made, of which 40 lbs. will be used in the tests on each system. Each cotton will be spun from two counts of roving on each system. In spinning, experiments will be made on the use of double roving as compared with single roving.

The drafts for double roving will be as follows :—

		No. of Doffs.
High drafts	.. 10, 12, 14, 16, 18 ..	5
Ordinary drafts	.. 10, 12, 14, 16, 18 ..	5

The drafts for single roving will be as follows :—

High drafts	.. 6, 8, 10, 12 ..	4
Ordinary drafts	.. 6, 7, 8, 9, 10, 12 ..	6
		20

Thus there will be

20 doffs per count of roving ;

40 doffs for 2 counts of roving per system per cotton ;

120 doffs for 2 counts of roving for 3 systems per cotton ;

600 doffs for 2 counts of roving for 3 systems for 5 cottons.

It is evident that it will not be possible to spin all the types of yarns referred to above, as the conditions of spinning will not permit of it for some of the cottons. In any case, it is clear that some modification of the scheme may be necessary in the light of the results which will be obtained for the first cotton subjected to these tests.

(Signed) A. JAMES TURNER,
Director,
Technological Laboratory.

APPENDIX C.

Summary of Results of Limit Spinning Tests on Cambodia Co. 1 (295), 1927-28.

Counts.	Front Roller Speed.						Ring Frame Yarn Breakages per 100 spindles per hour.						Lea Count-Strength Product.					
	A	B	C	D	E	F	A	B	C	D	E	F	A	B	C	D	E	F
20's ..	194	182	180	170	170	160	0	4	8	3	0	8	1786	1804	1847	1841	1812	1776
24's ..	178	165	166	158	154	147	0	2	8	6	0	2	1696	1773	1757	1793	1758	1715
28's ..	178	166	157	152	143	135	5	1	6	8	2	5	1486	1582	1624	1633	1627	1555
32's ..	166	156	144	140	134	127	10	0	5	2	0	0	1558	1570	1605	1549	1500	1491
36's ..	154	146	132	126	121	117	9	1	4	0	4	1	1457	1480	1472	1511	1459	1439
40's ..	149	138	130	127	121	117	13	4	1	1	7	0	1350	1417	1425	1392	1356	1314
44's ..	136	130	126	121	113	106	18	12	4	3	1	6	1172	1297	1305	1302	1254	1215
48's ..	130	124	118	115	106	104	47	18	15	6	9	5	1192	1204	1218	1217	1155	1176
52's ..	94	102	106	107	103	98	60	25	23	18	11	8	912	1102	1190	1157	1108	1092
56's ..	93	99	106	104	100	97	141	78	72	38	23	19	851	940	1090	1060	1023	1000
60's ..	74	73	70	72	69	66	148	72	18	32	26	12	806	841	1042	997	992	1017
60's ..	69	..	..	..	..	..	85	..	..	..	..	..	..	..	..	..	..	..
70's ..	73	76	84	77	74	74	270	175	154	149	82	68	..	..	..	883	840	806

Only one lot in 70's counts. Twist constants ... A = 3·75, B = 4·00, C = 4·25, D = 4·50, E = 4·75, F = 5·00

APPENDIX D.

Summary of the Work on Spontaneous Combustion of Cotton.

(A). *Exposing damp cotton.*—Damp cotton (with 10 per cent., 20 per cent. and 27 per-cent. moisture content) in sealed flasks were exposed daily in the sun and a similar lot was exposed in the room for over six months, but so far, no change has been observed.

(B). *Cotton exposed over water.*—Cotton was exposed over water inside a desiccator for over 4 months when a portion of the cotton was found linted red due to the growth of chromogenic bacteria, which were subsequently isolated.

(C). *Fermentation of Cotton and Jute Cellulose.*

(*i*) 70 gm. of dirty Umri Bani cotton were packed in a bottle and water added up to the neck. Slow fermentation started after 36 days and about 60 cc. of gas was collected within 3 months.

(*ii*) 70 gm. of cotton with 2 per cent. by weight of gunny cover were similarly put in water inside a bottle. Fermentation started after 34 days and about 75 cc. gas was collected in 3 months.

(*iii*) 70 gm. of cut pieces of gunny cover were put in water inside another bottle. Fermentation was started after only 10 days and over 750 cc. of gas was collected in 3 months. The gas, however, was found inflammable.

(D). *Variation of Temperature in damp cotton and gunny cover.*—In order to find out the rise of temperature, if any, due to the action of bacteria on cellulose, two lots of cotton and gunny cover with 50 per cent. moisture content, were kept under adiabatic condition for over two months, but so far, no change in temperature was recorded.

(E). *Effect of exposing cotton and gunny cover over water.*—In order to find out whether inflammable gas is given out by cotton and gunny cover under damp condition, about 2 lbs. of dirty cotton and similar quantity of gunny cover were separately kept over water inside desiccators. A small quantity of gas has been collected, after two months, from the gunny cover only.

(Signed) D. L. SEN.

APPENDIX XXIX.

SUBJECT 19.—*Technological Research.*

II. Report of Technological Research Sub-Committee.

Owing to Mr. A. James Turner, Director, Technological Laboratory, proceeding on leave out of India on June 14th, 1929, the Technological Research Sub-Committee met on the 11th June 1929.

1. The Director's progress report was considered and approved. The Sub-Committee discussed the question of undertaking the testing of samples of actual commercial types of cotton at the Laboratory in view of criticisms made that spinning tests on samples of cotton provided by Agricultural Departments were not of much use to the cotton trade as these did not represent the actual commercial crop available in the market. The Director said that he thought that a good deal could be done in this direction with the co-operation of the mills but it would be necessary to ensure that the results of such tests were of general interest and were not used as a certificate for trade purposes.

2. The Sub-Committee were informed of the results of a number of tests on samples of Punjab-American and Mollisoni cottons received from different parts of the Punjab during the present season. There were certain striking differences according to the place of growth and a Technological Report has been prepared giving the results in detail with a brief discussion of them. It was agreed that the neppiness of the variety 289F—as shown by the tests—presented a very interesting problem and that a discussion on the causes of the neppiness of this variety should be invited at the time of the full Committee meeting in July.

3. The Director reported the progress made with the tests on blow-room and card-room loss of certain commercial standards supplied by the East India Cotton Association (ref: Appendix A of Director's Progress Report). It was decided that it would not be advisable to publish these results eventually as the anomalies which had appeared would be misleading to consumers. However, the Sub-Committee agreed that the complete results, when available, should be brought to the notice of the East India Cotton Association.

4. The Sub-Committee considered the progress of the scheme—submitted by the Director at the last meeting of the Technological Research Sub-Committee—for the investigation and use of three different High Draft systems in order to judge their comparative merits*. After a technical discussion on certain details of these experiments the Sub-Committee approved of Mr. Turner's proposal for a modification in the scheme whereby the three systems under test could be carried on simultaneously. Mr. Turner pointed out that such a modification would ensure a more reliable basis for comparison of results and would be more convenient in working.

5. The Director reported the progress made in an investigation directed towards testing of standard Indian cottons in much higher counts than those in which they are normally spun at the Laboratory (Appendix C of Director's Progress Report). A beginning of these "Limit spinning tests" had been made in the spinning of Cambodia Co 1. (295) and Mollisoni cotton was now under test. It was agreed that, in the tabulated statements of the results of these tests, the actual lea counts spun should be shown as this figure would be more intelligible to practical spinners than the lea count strength product.

6. The Sub-Committee considered a progress report upon the spontaneous combustion of cotton (Appendix D of Director's Progress Report). It was agreed that work on these experiments should be continued.

7. The Sub-Committee noted that the post of Assistant Director, Technological Laboratory, had been advertised both in India and England and that, in accordance with the decision of the 81st meeting of the Standing Finance Sub-Committee (12th April 1929) no steps would be taken to appoint a Selection Sub-Committee for this appointment pending the receipt of all applications for the post.

8. The Sub-Committee approved the creation of an additional post of Technological Assistant for the Punjab and the necessary increase of Rs. 1,850 in the provision under "Technological Research—Provincial"—for the current year.

APPENDIX XXX.

SUBJECT 12.—*Cotton Ginning and Pressing Factory Pools—Replies from local Governments.*

The subject of pools of ginning and pressing factories and their effect on the interests of the cultivators was raised at the last meeting of the Indian Central Cotton Committee (December 1928) when Mr. M. P. Kolhe, B.A., LL.B., M.L.C., cotton growers' representative, Central Provinces and Berar, submitted a letter on the system of "pooling" for consideration. The following resolution was passed :—

RESOLUTION 28.—"That the Committee is of the opinion that the pools of ginning and pressing factories, wherever they are in existence, are detrimental to the interests of agriculturists and therefore requests the Provincial Governments to examine the question and take such action as may be necessary."

2. Copies of the resolution, together with an extract (para. 231) of the report of the Indian Cotton Committee (McKenna Committee) of 1918-19, dealing with this question were sent to Provincial Governments. Copies of the replies received up-to-date are attached.†

3. The Government of the *United Provinces* consider that it is not desirable to take any action until a complete investigation of the facts, relating to the formation of "pools" and the extent to which they are a burden on the cotton-grower has been made. They further submit that such an investigation should be on a uniform plan and should be carried out by trained investigators and that this work should be undertaken by the Indian Central Cotton Committee. In *Ajmer-Merwara* the Commissioner reports that the evils inherent in the pool system are not very marked in that district. He recommends the suggestion that "where members of a pool in any district keep one or more factories closed without adequate justification, no night shift working should be allowed in any circumstances." In addition, he does not think that any check by legislation would be effective or that the rates could be fixed by Government. The Chief Factory Inspector, Bombay Presidency, reports that a system of licensing with control of rates by Government would be the only effective control over the ginning and pressing industry and instances of cases of failure of co-operative ginning factories in the Bombay Presidency. The Director of Agriculture, Bombay Presidency, is also of the opinion that Government might consider the advisability of introducing legislation to control rates but deprecates

* Appendix B of Director's Progress Report.

† Not printed.

any undue haste in dealing with this matter. The Director of Agriculture, Madras, considers that the refusal of licenses for night ginning is the most adequate action which could be resorted to immediately. With regard to the remedy suggested by the Indian Cotton Committee, *viz.*, the licensing of cotton ginning and pressing factories, the Director considers it possible that this remedy could be taken by local Governments under clause (9) of Section (13) of the Cotton Ginning and Pressing Factories Act (1925) which delegates to local Governments the power to provide for "any matter other than those dealt with in the preceding clauses (a to f) which is to be or may be prescribed or for which provision is necessary in order to carry out the purpose of this Act."

The Governments of Burma, North-West Frontier Provinces, Bengal and Delhi have reported that "pooling" does not exist among cotton ginning and pressing factories in these Provinces and that therefore no action is considered necessary.

Replies are still awaited from the Governments of the Central Provinces, Madras, the Punjab and Bombay.

4. At their meeting on the 14th May 1929, the Cotton Ginning and Pressing Factories Sub-Committee considered the replies received from local Governments previous to that date. The Sub-Committee expressed the hope that, in view of the importance of the subject, a full discussion in the matter would take place at the July meeting of the full Committee. It was decided that the views of Factory-owners' Associations, where such bodies were constituted, should also be collected in order to complete the information to be placed before the full Committee.

Accordingly Factory-Owners' Associations in the Central Provinces and Bombay Presidency have been addressed and have favoured the Committee with their views on this subject.

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